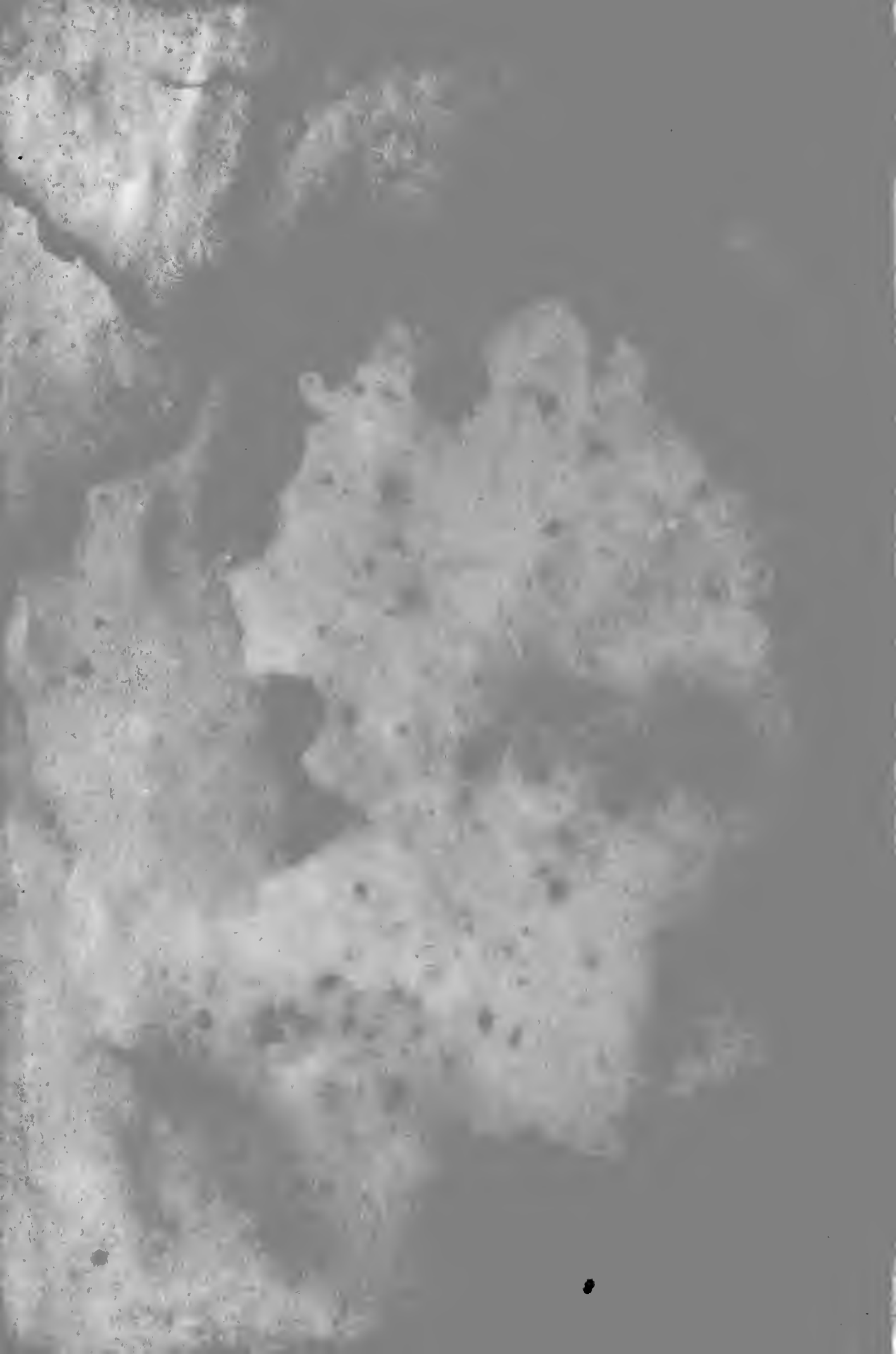
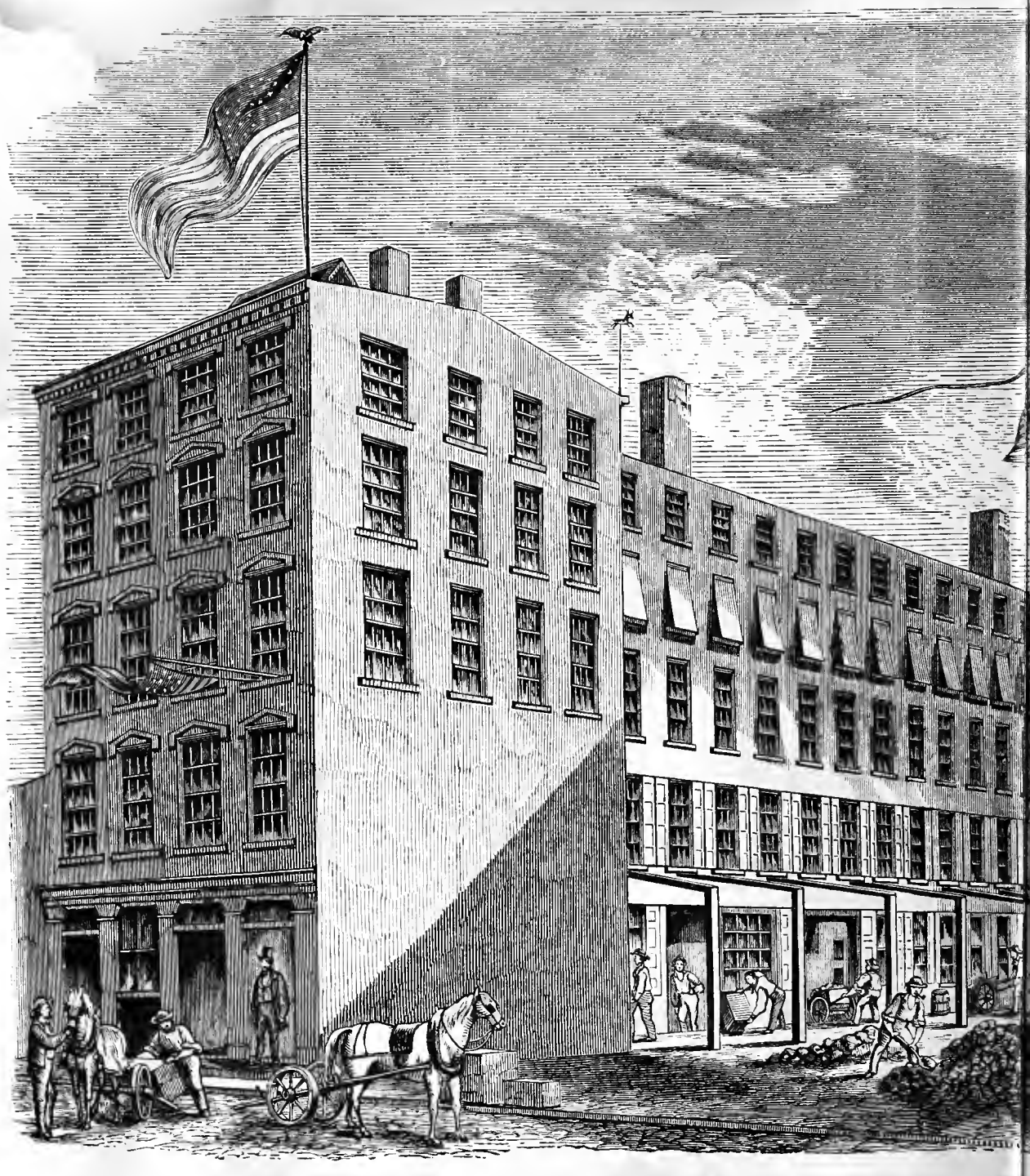
ROMAINE, p. 120

"One of the finest rep. in the field."





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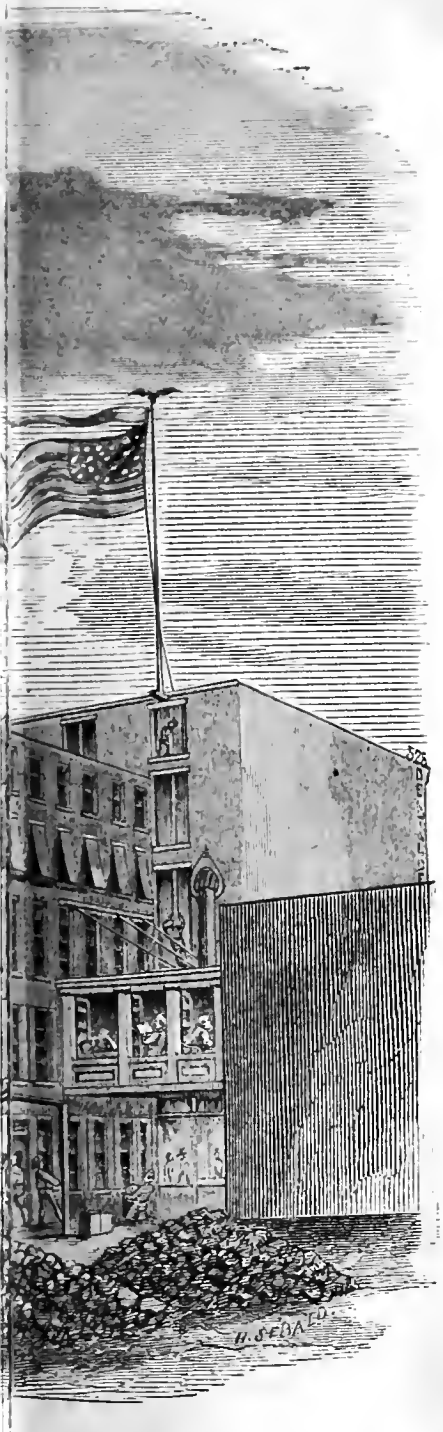

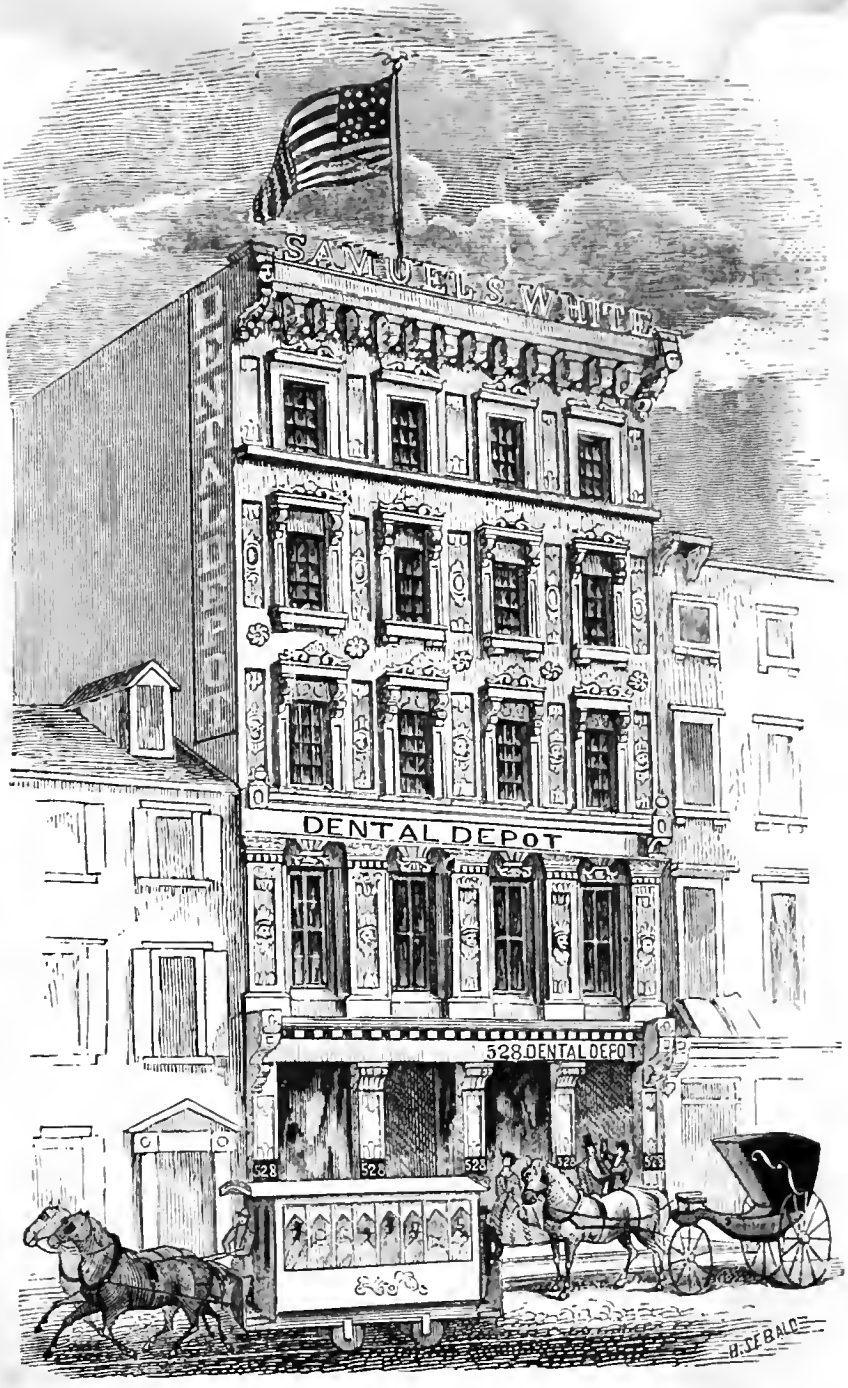

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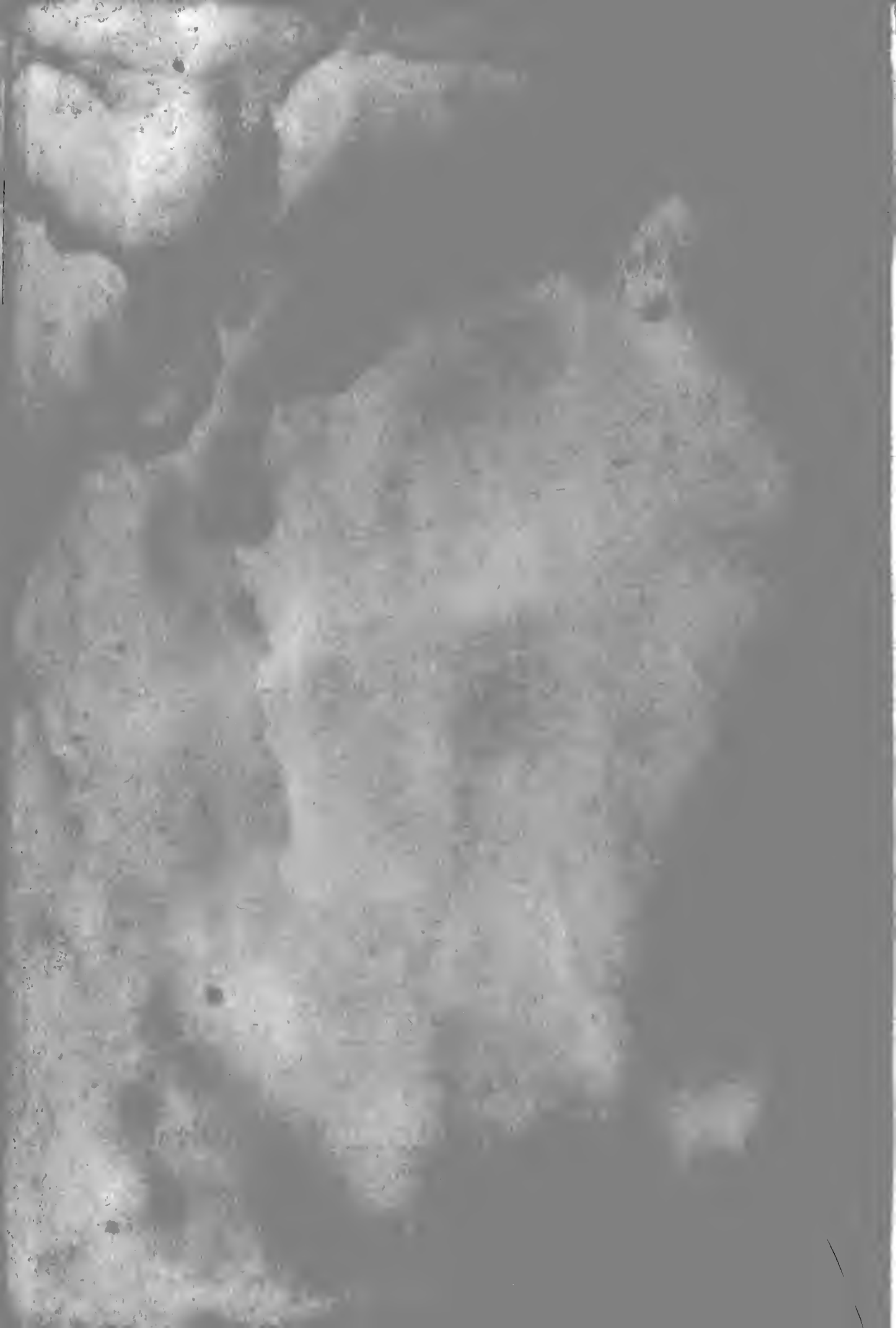
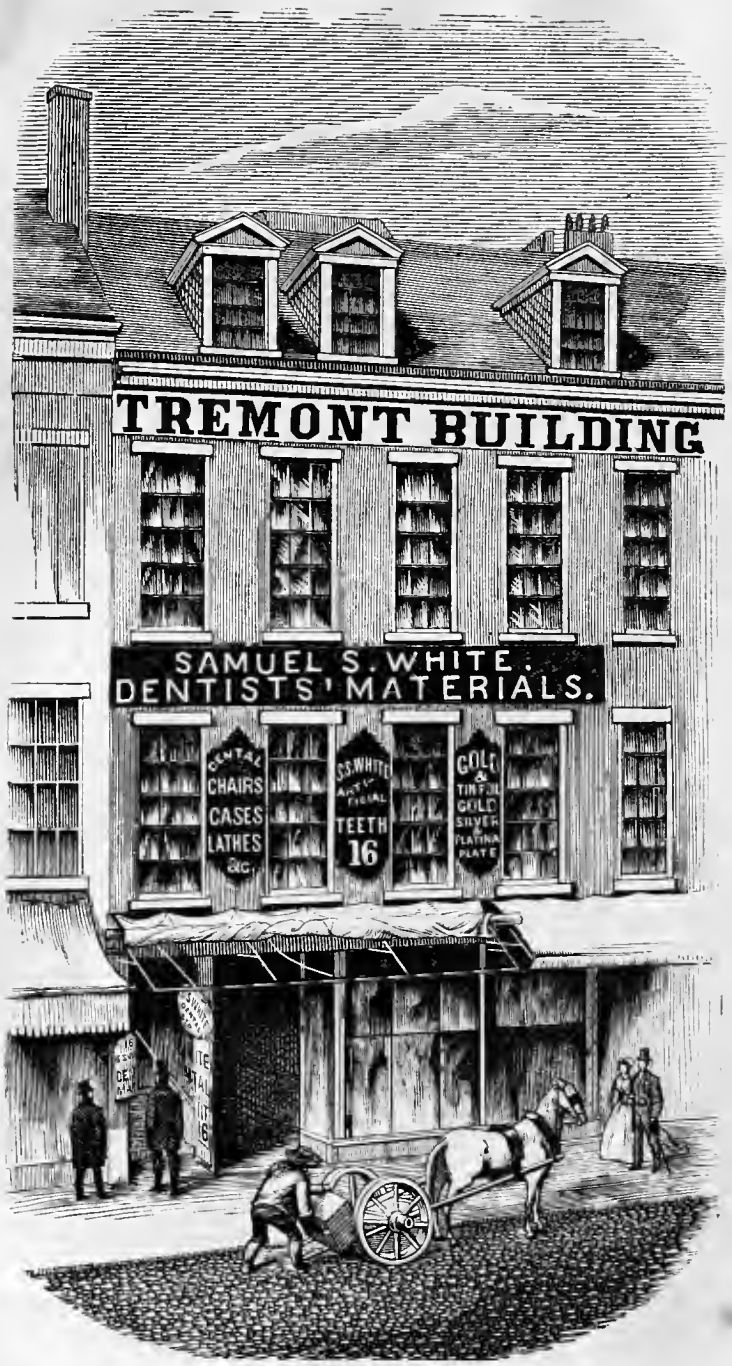
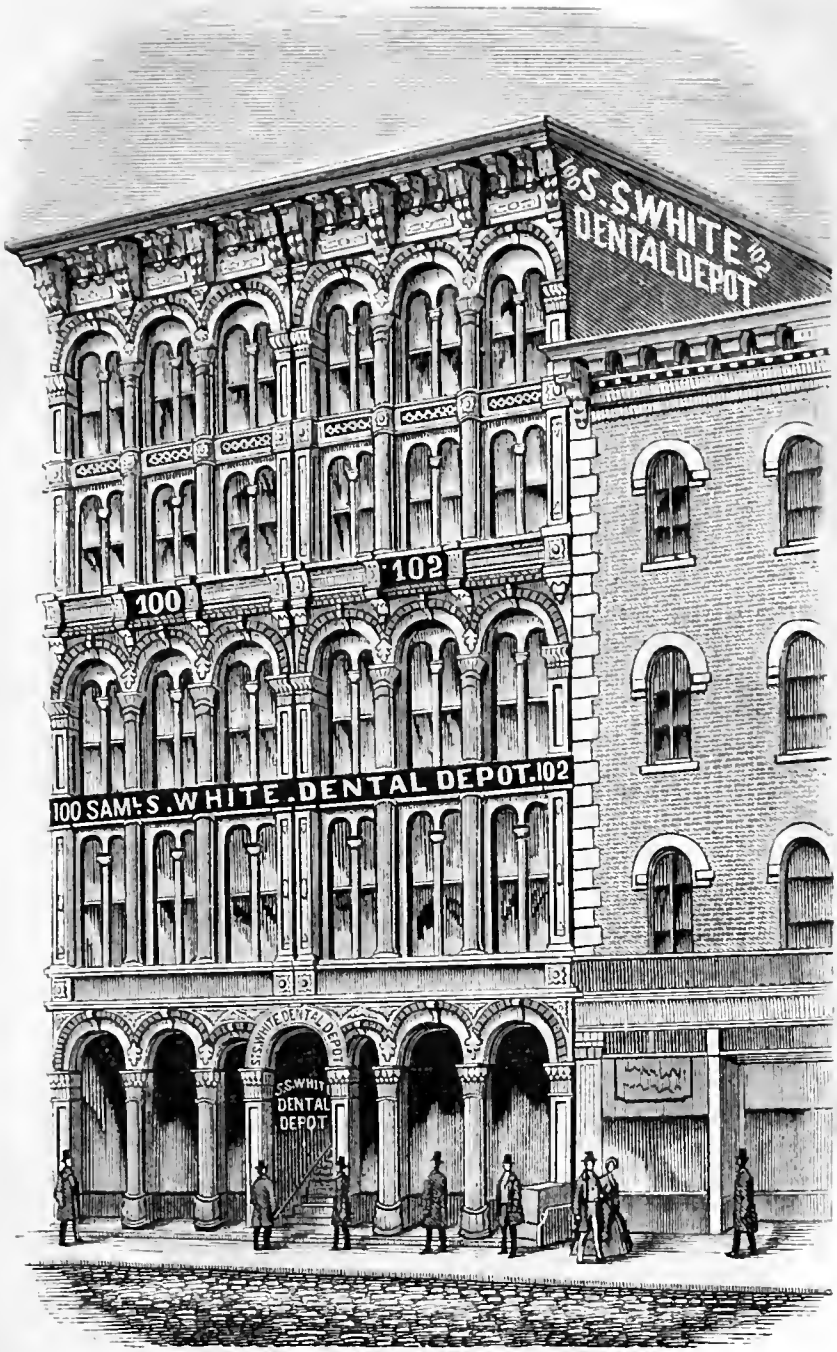
PHILADELPHIA DEPOT.





BOSTON DEPOT.



CHICAGO DEPOT.

CATALOGUE

OF

DENTAL MATERIALS,

FURNITURE,

INSTRUMENTS,

ETC.

FOR SALE BY

SAMUEL S. WHITE,

MANUFACTURER, IMPORTER, AND WHOLESALE DEALER IN ALL ARTICLES APPERTAINING TO DENTISTRY.

TRADE

MARK.

JANUARY 1st, 1867.

MANUFACTORY AND PRINCIPAL DEPOT:

528 ARCH STREET, PHILADELPHIA.

BRANCHES:

767 & 769 BROADWAY, NEW YORK. 16 TREMONT ROW, BOSTON.

100 & 102 RANDOLPH STREET, CHICAGO.

MANUFACTURE OF PORCELAIN TEETH.

With a view of enabling dentists to gratify the natural curiosity of patients as to the composition and manufacture of porcelain teeth, the following description, condensed from the editorial correspondence of the *Chicago Tribune*, is deemed a suitable preface to this catalogue.

"No part of my sojourn in Philadelphia has been more interesting to me than the visits I have paid to some of the representative industrial features of the city. The leading manufacturing enterprises whose magnitude is the growth of years, and whose products carry the name of Philadelphia manufacturers to all parts of the country and the habitable globe, are a theme I purpose to speak of in this letter. I have passed the morning among teeth. If there be, *par excellence*, an American specialty, it is dentistry. Time was when the dentist was to a large extent his own manufacturer of the teeth with which he contrived to supply nature's losses. It is curious now to look back at the early stages of the art, and see by what steps it found its way towards perfection. First, human teeth, parted with and sold as articles of merchandise; then a recourse to kindred animal substances, bone or ivory, the tusk of the behemoth being largely esteemed. But these had all the perishable character of organic substances, the ban of decay had been passed upon them, and so they fell into disfavor. Then the day of porcelain teeth began.

"Among the American dentists laboriously working at the problem of reproducing nature's effects in the machinery of mastication, it could but happen that the portal of happy invention must yield to some fortunate knock, and here in Philadelphia the response was first given. It is not my purpose to decide the claim of priority. It is hardly necessary to do more than show what results have grown from a happy beginning. It is not invidious to declare how very largely these come from the busy work-rooms, grinding-mills, and glowing furnaces of S. S. White's manufactory, whereof I am writing these lines. Of the superiority of his teeth, the fact that thirty-nine first premiums, including one from the great World's Fair, have been received, is sufficient proof. The building is an elegant five-story structure on the street front, connecting, with a maze of work-rooms, in large five-story buildings in the rear, which extend

through to the next street, and fill the whole space with the processes of teeth-making. Some items of interest may be acceptable to the readers of the *Tribune*. The imitator of the human tooth studied its structure to find at the outset that it is not homogeneous, or of one material in structure. The failure to discern this brought failure in the earliest attempts at simulation. An artificial tooth must possess certain qualities apart from size, shape, and color: a front surface which must closely resemble the enamel or external covering of the natural tooth, and a body having the toughness which allows the vigorous use of the hammer in riveting without fracture, and the use of the blow-pipe in soldering without liability to crack. If the tooth were one homogeneous mass, the requisite amount of vitrifaction necessary to imitate the enamel would render it brittle; but a proper amount of translucency must be preserved, or there will be the opaque clay-colored teeth, which proclaim their artificial character to the most casual glance; so that a nice calculation is necessary not to sacrifice beauty to strength, or render the teeth frail and valueless in the effort to make them beautiful.

"There must also be the distinctly marked clear cutting edge of enamel projecting beyond the body of the tooth, and contrasting, as in nature's work, with the yellow or brown base, and yet this depth of color in the body and translucency of the point must be so nicely blended that the line of union cannot be determined. In this establishment these and many other valuable results have been secured by a patience of research and a fidelity of application which have given the house the prosperity and the reputation it enjoys throughout the civilized world.

"The principal materials entering into the composition of mineral teeth are feldspar, silex (flint), and kaolin (clay), with various fluxes, so known in chemistry, more familiarly characterized as *glasses*, used to determine the point of fusion desired of different parts of the tooth. The general tone or tint of these materials is white or dusky yellow, so that coloring forms a prime adjunct in the process.

"The chief coloring substances are titanium for yellow, platina sponge for gray, oxide of cobalt for bright blue, and oxide of gold for red. These, with others in varying combinations, are used to color the body, point, and outside enamels. To form some idea of the immense variety of shades or grades of color capable of being produced, you have only to be told that there are more than forty shades of color in the bodies used, and an equal number in the *point and outside enamels*. Thus, starting with the lightest shade of body known as 'A,' you may produce forty different grades by using a different point enamel, and on each of these a different effect by the use of various outside enamels, so that with a single body of any one color you may produce 64,000 varieties or gradations of color, and as there are thirty-nine other bodies, a smart calculator can determine the many changes of which they are capable.

"It is not pretended of course that all these shades are produced, but some

idea may be formed of the need of variety by the fact that out of innumerable trials in the way of combinations, one hundred and thirty standard shades are made, duly arranged and classified by numbers, forming a gradual but quite perceptible progression from the most delicate blue white to the dark tobacco-stain. For the production of these colors you are not to think of a dyer's vat, but to remember that their bath is a glowing muffle at incandescent heat.

"Realizing what would scarcely enter into the thoughts of one not experienced, —*i.e.* the great diversity in color of the natural organs which these are made to imitate—we see that many teeth, good in themselves, have such an artificial appearance in the mouth, simply because the dentist, albeit an excellent mechanic, has lacked the perception to discover the shade made necessary by the complexion, hair, and eyes of the wearer, with all which creative wisdom has made the natural organs to correspond.

"Now, if the reader is ready, we will accompany him through the apartments devoted to the manufacture. Beginning on the ground floor, we find workmen busy with the crude materials. The feldspar (found abundantly in the State of Delaware) is thrown in large masses into a furnace, and subjected to a red heat. then plunged into water, which renders it brittle and easily broken by the hammer into small pieces, so that all foreign matters, such as mica or iron, with which it may be mixed, can be separated. It is then mashed into a coarse powder, and subsequently ground under water, in a mill in which heavy blocks of French burr-stones are pushed round on a nether millstone of the same material, until it is an almost impalpable powder—so fine that it will remain suspended in water for a long time. The silex is subjected to the same process. The colors are long and patiently ground in a mortar and pestle machine, driven, as are the mills, by an eight-horse power caloric engine.

"The materials, having been dried and sifted, are carried to the mixing-room, where they are properly proportioned, and again ground in combination into the various mixtures desired. At this stage the body assumes the consistence and appearance of putty; the point enamel of a thick batter; and the outside and gum enamels of cream. The body is now ready for the moulder's-room. But we must first see how the moulds are made. They are of brass, in two or more pieces, one-half the tooth being represented on either side. Great care is necessary in the construction of these moulds, their cost varying from twenty to seventy-five dollars each. On them depend the shape and style of the teeth. They must be anatomically correct, and mechanically perfect. It is not that nature is introducing new styles of teeth as milliners their novelties, but continual approximation is being made to perfection in imitating the endless minor differences in teeth, and in adapting them to new methods of adjustment to the plates to which they are to be affixed. In this manufactory from 700 to 800 moulds are in use, making in all upwards of 10,000 shapes of teeth.

"Here is a spitefully busy little machine, too busy with one particular process to tell us what it is doing, and yet we discover that it is eating platinum wire and

spitting out tiny pins at the rate of *six hundred a minute.* Each comes out with a solid head like that of a brass pin, with rough indentations in the other end, so as to be firmly held in the plastic body of the tooth until fierce heat makes the union indissoluble. The strength, infusibility, and incorruptibility of platinum make it the close companion of mechanical dentistry. The consumption of this metal in the establishment reaches the substantial sum of eighty-six thousand dollars per annum.

"We come now to the moulding-room. Here we see the use of those little platinum pins, and are told that there are more than twenty varieties of size adapted to the different sizes of teeth. In each tooth matrix we discover two minute holes, which a workman, with rapid tweezers, is fitting with pins of the proper thickness and length, which are to form the future fastening of the tooth to the plate of gold, silver, or rubber. The mould is then passed to the next workman, who takes up, on a small steel spatula, the requisite amount of point enamel, and with this forms the cutting edge of the tooth, and passes the mould to his neighbor, who fills the matrix with body, then closes it. It is then pressed by machinery and deposited in the drying oven. Carefully watched, it is taken out at the proper moment and emptied of its contents, which, tender and brittle, are laid on clay slides, and subsequently subjected to the process called biscuiting, which is done by bringing them to a cherry-red heat. The teeth are now like chalk, and can be cut and filed as desired.

"From the biscuiting furnace the teeth are carried to the assorters'-room, where they are arranged in sets, and after this the members of a set keep company through all their varied experience. This work is done by small boys, whose quickness of perception qualifies them for the work, and who become so expert that they know every tooth, and the number of the mould from which it came, as well as they know each other. Arranged in rows in tin waiters, the teeth are now forwarded to the trimmers'-room, where the busy fingers of forty tidy and happy-looking young ladies smooth them into readiness for the enamelers'-room. Here also is furnished employment for fair fingers. The enamels are laid on with a brush, and the work requires delicacy and care. Having received their coats of enamel, the teeth, descending again toward the ground floor, from which they started, halt in another room to receive the gum enamel, which, when the fire shall have passed its verdict upon them, will reflect the rosy cheeks of the artists who laid it. But, taking up the line of march, they are again halted that other light fingers, the owners of which are called finishing trimmers, may remove any surplus of enamel from the sides, make true with fine-pointed instruments the arch of the gum, and lay the teeth carefully on beds of quartz-sand in trays of fire-clay, ready for the fiery trial through which they are to pass, and without which they are unfit for life's work.

"Beyond this no tool can follow them. Imperfections heretofore could have been repaired, but in the future beyond the fire, the tooth is either perfect or a failure irremediable. The furnace is an institution entitled to respect for its

intensity. In its centre is a muffle of fire-clay, entirely surrounded by the glowing fuel, a charge of half a ton's weight of coal, itself carefully bricked up before firing, that no impurities of dust or vapor shall reach the teeth. Take out the small half-oval door of the muffle, and you shall feel a heat the eye shrinks from registering, an incandescence that startles you by its fervor. In from fifteen to thirty minutes, depending upon the state of the fire, the teeth, glowing like the oven, are taken out finished. The dull enamel has become as glass. The lustreless oxides have yielded their color, and the tooth that went in friable and brittle has come out adamant. But there is here required a skill, the acquisition of which is one of the marvels of the mechanic arts. It is a trained judgment, a skill of eye and handling, that enables the burner to give success to the work of those who have gone before him, and at the precise point where a shade of failure is utter ruin. A little too long in that heat, and the teeth are ruined; while the evils of '*underdone*' are to be guarded against equally with the housekeeper's baking.

"The teeth are now done and ready for the curious characteristic red-wax cards on which they go into the market. We have not time to describe the various minor processes of preparing colors, fluxes, oxides, etc., or to speak of the manufacture, carried on in one of the large rooms, of corundum wheels used by the mechanical dentist in grinding teeth to fit the plate; nor can we stop in the rooms devoted to the preparation of wax in various forms and combinations for dental purposes; nor in the packing-rooms—one of which is used for boxing chairs, spittoons, lathes, dental cases, and other bulky goods; the other to the bottling, boxing, and labeling of various chemical and medicinal preparations for the office and laboratory of the practitioner.

"In one of the rooms anvils were ringing, and files at work on some of the smaller steel implements of the dentist; a part of that branch of the business of the house, which gives exclusive employment to an extensive manufactory in another part of the city, whence iron and steel come forth in all the glittering multifarious forms that send a shudder through the observer of a dentist's well-filled case.

"There is one other little room which, as a journalist, we cannot afford to pass unnoticed—the sanctum from which issues The Dental Cosmos, a monthly, devoted to the interests of the profession. The *Dental News Letter*, a quarterly which preceded it, reached its twelfth volume, and was followed by the Cosmos, now in its eighth volume, the whole covering a period of twenty years. The title was advisedly selected to indicate the intention of the publisher: to cover the dentists' *world* of science and practice, and he has so far succeeded in his aim that the Dental Cosmos may, we think, by common consent, be set down as the most successful publication devoted to this specialty.

"Passing now from the manufacturing to the sales-rooms, we find a great variety and extent of stock of every conceivable article used by the dentist, from the smallest hand implement to the costliest plush-lined chair, with its

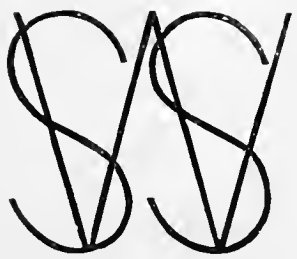
curious joints and luxurious appointments, associated, alas, with discomfort and suffering, but of that kind from which come health and restored beauty.

"The processes we have described in Mr. White's establishment, joined to the employment given in his sales-rooms, packing-rooms, and counting-rooms, furnish employment to nearly three hundred persons, with a pay roll of about four thousand dollars per week, and a product of four hundred thousand teeth per month.

"And so passed the morning at the Arch Street establishment."

TO THE DENTAL PROFESSION.

TRADE



MARK.

This Catalogue has been copyrighted; but no copyright, it would seem, is sufficient to prevent parties from making use of that which is original, peculiar, and proprietary, as will be manifest to any who are familiar with most of the catalogues which have appeared from those in the trade, in which our cuts, numbers, classifications, and descriptions have been copied without alteration (the exact language meeting their views so well that no change was deemed necessary); embracing lists of articles of our own manufacture, arbitrarily numbered for our own convenience, and having no significance outside of that fact, and which could not therefore be supplied by other parties except through us; a course which appears more complimentary to us than honorable in the parties so acting. We have therefore secured, by law, a *Trade Mark*, which, so far as practicable, will henceforth be stamped or otherwise placed upon every article manufactured by us.

The Catalogue, which has been carefully prepared, is respectfully submitted to the profession, in the belief that its use will prove a great convenience to buyer and seller.

Our stock now on hand is larger, more varied and complete than ever before; and our aim has been so to arrange and classify it as to enable our customers to see in detail the varieties in quality and price of any article they may desire.

A full supply of all goods named herein will be kept constantly on hand, and all new and useful improvements that may be made added thereto; thus enabling the dentist to find at our establishments every requisite of each department of his art.

In the department of precious metals, special care will be given to make the goods conform in fineness to the standard claimed, and in this matter we invite

investigation and comparison, as all of our Gold Plate is made by the direct combination of pure metals, alloyed according to official standard; and not from the remelting of scraps and filings. Scraps and filings will be purchased at their full value, as nearly as can be determined. We are willing to pay all that we can get for them at the mint.

Special attention is solicited to our stock of imported goods.

In every department of the business, our determination is, so fully to meet the wants of the profession as to deserve success.

SAMUEL S. WHITE.

HINTS FOR ORDERING GOODS.

In ordering goods by Catalogue, please specify carefully the article desired, with price affixed, and as we have published several Catalogues, as well as a number of price lists, during the last six years, our customers will be careful to state that it is the Illustrated Catalogue of 1867 from which they make their selection.

Bring the various items of an order together at the beginning or close of a letter, and thus avoid the oversight which may occur when they are scattered through the body of the correspondence.

Do not depend on our remembrance of some previous order.

State how you wish your goods forwarded—by mail, express, or otherwise.

Write the name of your town, county, and State, and your own name *distinctly*.

Any article needed by the profession will be procured and furnished at advertised rates.

If an article not enumerated in the Catalogue is desired, be particular to give a full description, and, if possible, the price when there is choice of qualities or styles.

The Catalogue of any manufacturer or dealer in dental goods may be used in ordering from us, care being taken to designate, by date or otherwise, the edition of the Catalogue, or by sending it, to be returned with the goods.

Goods sent by mail, except such articles as are advertised free, will be charged with the postage, which must accompany the remittance.

Goods ordered to be sent by express, bill payable on delivery, will be charged with expenses of collection. This charge insures the safe delivery of the goods to the purchaser, as well as the safe return of the money to us.

NOTE.—*None but Express Companies collect bills on delivery of the goods.*

Postal money orders, and checks, or drafts drawn to our order, *at our risk*. Registering letters is simply informing dishonest clerks that money is inclosed.

All goods are carefully packed, and can be transported safely, with careful handling, to any part of the country. They become the property of the purchaser when they leave the store; therefore for all delays or damages he must look to the transporters of the goods, who alone are legally responsible to the owner for their prompt and safe delivery.

Goods are not insured except by request, and then always at the expense of the purchaser.

Every article sold by us, not answering our description, or not according to order, will be taken back without loss to the purchaser.*

Should there be any misapprehension or overcharge on our part in putting up an order, it will afford us pleasure to correct it on receiving prompt notice of the same, as it is our desire to give entire satisfaction in every transaction.

Attention to the foregoing hints, will enable us to fill all orders, large or small, as satisfactorily to the purchaser as though he were present to make selections.

Residents of foreign countries will find it to their advantage to order direct.

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* NOTE.—We are often at a loss to understand the meaning of dentists who write for one or more teeth to be selected by a sample sent, when the terms "to match" and "to correspond with" are used; as these expressions are intended sometimes to designate the *mate* and sometimes the *duplicate* of the pattern. The annoyance caused by delay, etc. can be avoided, if the purchaser will be particular to name the variety of tooth desired, whether Right or Left, Superior or Inferior, Central, Lateral, Canine, Bicuspid (1st or 2d), Molar, Single or Block, Gum or Plain, for Plate or Rubber Work.

NOTICE.

At each of the depots there is kept A BULLETIN BOARD, on which brief notices may be registered, FREE OF CHARGE, OF *Dentists desiring Assistants, Parties seeking Positions in the Office or Laboratory, Partnerships, or Practices for sale, or desired.*

THE

DENTAL COSMOS;

A Monthly Record of Dental Science,

DEVOTED TO

THE INTERESTS OF THE PROFESSION.

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One Copy, one year, in Advance - - - $2 50
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Specimen numbers sent on application. Subscriptions taken yearly or half yearly.

* { The Volume commences in January.
The Half Volume commences in July.

The DENTAL COSMOS is now in its Eighth Volume, with a constantly increasing subscription list.

☞ Contributions to its pages respectfully solicited.

Advertisements of matters strictly connected with the practice of Dentistry, received at the following rates:

½ page	1 Month,	$15.00	2 Months,	$20.00	3 Months,	$25.00
¼ "	"	10.00	"	14.00	"	18.00
⅛ "	"	5.00	"	9.00	"	12.00

In consequence of the demand for space, no advertisements received for more than a half page, nor for a longer period than three months, without a special agreement.

We can furnish volumes one, two, three, four, six, and seven of the DENTAL COSMOS, bound in a superior manner, in half Turkey Morocco, at $3.50 per volume.

SAMUEL S. WHITE,
Publisher.

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* The publication of the COSMOS was commenced in August, and the issue for July, 1867, will complete the Eighth Volume. In consequence of the difficulties arising from a misapprehension of this fact, and the numerous subscriptions received, which it is desired shall commence with the first of the year, we have concluded to publish one volume of five numbers, commencing with August and closing with December, 1867. The price of this volume will be $1.00. The 1st of January, 1868, will therefore be the commencement of the Tenth Volume.

ARTIFICIAL TEETH.

To this, the largest and most important department of our business, we desire to call special attention and critical examination—by comparison with natural teeth, in reference to shape, color, texture, translucency, and vital appearance, and by contrast with teeth of other manufacturers in reference to strength, lightness, capability of resisting changes of temperature in soldering, and adaptability.

What is included in these terms is briefly as follows:

Shape. The preservation of the distinctive characteristics of the different teeth of the lower and upper jaws, and of the right and left sides of the mouth, in their relations to each other and to those with which they antagonize, and the resemblance which, when properly adjusted, they bear to the dental arch.

Color. The imitation in this respect of the colors of the natural teeth, as shown by placing them alongside of teeth in the mouth—the nice blending of the brown or yellow base or body of the tooth with the clearer enamel of the cutting edge.

Texture. The absence of the appearance of vitrifaction; the soft, waxy, enamel-like, and natural surface which they present.

Translucency. The word expresses all that can be said in opposition to teeth that are opaque or clay-colored, which contrast so strongly with nature's workmanship.

Vital Appearance. Made up by the combination of color, texture, translucency, absence of the appearance of vitrifaction, and the blending of the colors of the body and enamel in proper relations—especially manifest when exposed *in the mouth to an artificial light.*

Strength. As tested by riveting, and other processes of the workman, and by their legitimate use by the wearer.

Lightness. In any test of strength, the weight must be taken into account, the object being to secure the greatest strength with the least weight and bulk.

Resistance to Variations of Temperature. As ascertained by the process of soldering, in the manufacture of new dentures, or the repair of old oues.

Adaptability. In the ease with which they can be adapted to various conformations of the maxillary, with slight labor on the part of the artist in grinding and fitting.

In the *combination* of these essential characteristics, we claim a marked superiority for our teeth.

Our facilities for supplying variety of shape, size, and shade in ARTIFICIAL TEETH are unequaled by any establishment in the world, whether reference is had to the number of hands employed, the number of teeth made, or the number of moulds in use.

Thirty-nine premiums for our manufactures have been received from various organizations in this country and abroad.

PORCELAIN TEETH.

Our stock of Teeth is larger, more varied, and complete than at any previous time, embracing a large variety of size, shade, and form of

TEETH ADAPTED FOR A VULCANIZABLE BASE,

IN THE FOLLOWING VARIETIES:

BLOCKS IN SECTIONS OF TWO OR THREE,

WITH A

PATENTED DOUBLE-HEADED PIN.

(Patent issued January 21, 1862; reissued April 29, 1862.)

SINGLE GUM TEETH.—SINGLE PLAIN TEETH.

Each class in sets of twenty-eight, fourteen, six, four, and two; and Molars and Bicuspids in sets of eight.

TEETH FOR MOUNTING UPON GOLD AND SILVER PLATE,

CONSISTING OF

PLAIN AND GUM TEETH,

In sets of twenty-eight, fourteen, six, four, and two; and Molars and Bicuspids in sets of eight.

Teeth made expressly for **CONTINUOUS GUM WORK** in sets as desired.

PIVOT TEETH.

New styles and forms are being constantly added to our stock.
A liberal discount from retail prices will be made to Wholesale Dealers.
Discount to Dentists according to quantity purchased; and special discount to Dealers.

GOLD MEDALS.


AMERICAN INSTITUTE
NEW YORK.


AWARDED
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Jones White & Co.
For the best
ARTIFICIAL TEETH
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1849.


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& Mc Curdy
For the
best 100 Teeth
Offer'd


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To
JONES WHITE & Co
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Most Improved
TEETH


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BALTIMORE


TO
Jones White & McCurdy
FOR
Artificial Teeth
1855.


AMERICAN INSTITUTE
NEW YORK


AWARDED
TO
Jones White & Co.
For the best
ARTIFICIAL TEETH
1855


MARYLAND INSTIT. FOR THE PROMO. OF THE MECH. ARTS
BALTIMORE


TO
Jones White & McCurdy
FOR
Artificial Teeth
1856


AMERICAN INSTITUTE
NEW YORK


AWARDED
TO
Jones White & Co.
For the best
ARTIFICIAL TEETH
1856


FRANKLIN INSTITUTE OF THE STATE OF PENNSYLVANIA.
1824.


REWARD OF SKILL AND INGENUITY
To
Jones, White & Co.
Philad.a Pa.
For Mineral Teeth
Emery Wheels & Stones
1850.


MARYLAND INSTITUTE FOR THE PROMOTION OF THE MECHANIC ARTS
BALTIMORE.


AWARDED
TO
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for Best Specimens of
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Oct. 31 1850.


FEAR NOT
E. S. MITCHELL SC


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AWARD TO
Jones White
& Mc Curdy for
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Teeth.
Exhibition of
1853
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THE PENNSYLVANIA STATE AGRICULTURAL SOCIETY.
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INSTITUTED
A. D
1851


Awarded to
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for best
Artificial Teeth
at the
Exhibition of
1851.


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1824


REWARD OF SKILL AND INGENUITY
To
Jones, White & McCurdy.
Philad.a Pa.
For
Artificial Teeth.
1854


PRESENTED BY THE
Jones White & McCurdy
Philadelphia
for
Artificial Teeth
1857.
METROPOLITAN MECHANICS INSTITUTE


FULTON INSTITUTE LANCASTER PA.
FOUNDED 1855.


AWARDED
TO
Jones & White
for
Porcelain Teeth
Nov 1859.


CHICAGO MECHANICS INSTITUTE.


AWARDED TO
Jones & White
for the best
Porcelain Teeth
1860


CHICAGO MECHANICS INSTITUTE.


AWARDED TO
Jones & White
for the best
Dental
Instruments
1860


AMERICAN INSTITUTE.
NEW-YORK.


AWARDED TO
Samuel S. White,
for the best
Artificial Teeth.
1863.


H.R.H. PRINCE ALBERT PRESIDENT OF THE ROYAL COMMISSION


EXHIBITION OF THE WORKS OF INDUSTRY OF ALL NATIONS
EXHIBITOR
MDCCCLI.


FEAR NOT


MASSACHUSETTS CHARITABLE MECHANIC ASSOCIATION
AWARD
TO
Jones, White & Co
for
Artificial
Teeth
Exhibition
of
1850
FOUNDED 1795. INCOR 1806


EXHIBITION
OF THE
INDUSTRY
OF ALL NATIONS,
NEW-YORK
1853.


FRANKLIN INSTITUTE OF THE STATE OF PENNSYLVANIA.
1824


AWARDED TO
Jones, White & Co
Philad.a Pa.
For
Artificial Teeth.
1848.
SECOND PREMIUM


FRANKLIN INSTITUTE OF THE STATE OF PENNSYLVANIA.
1824.


REWARD OF SKILL AND INGENUITY
To
Jones, White & Co.
Philad.a Pa
For Corundum
Wheels, Files &c.

IN ADDITION TO THE MEDALS,

WE HAVE RECEIVED

SIXTEEN FIRST PREMIUMS

IN

CERTIFICATES AND DIPLOMAS,

MAKING

THIRTY-NINE IN ALL.

CATALOGUE.

OPERATIVE DENTISTRY.

DENTAL CATALOGUE.

GOLD FOIL.

Samuel S. White's Gold Foil . . . . . .
Abbey & Sons' " . . . . . .
A. J. Watts' Crystal Gold Foil . . . . . .
A. J. Watts' Crystal or Sponge Gold . . . . . .
Wm. H. Atkinson's Gold Foil . . . . . .
E. Lamm's Crystallized Fibrous Gold . . . . . .
S. J. McDougall's Gold Foil . . . . . .
M. M. Johnston & Co's Adhesive and Soft Gold Foils . . . . . .

All other Foils at manufacturers' prices.

Put up in one-eighth ounce books or packages, and sold at the same rate as by the ounce. The price is regulated by the premium on gold coin.

Prices quoted each month in the DENTAL COSMOS.

NOTE.—S. S. White's Gold Foil is put up also in one-sixteenth ounce books, for the convenience of dentists who may wish to test its quality.

TIN FOIL.

Samuel S. White's Chemically Pure Tin Foil	per book	$0 50
F. H. Griswold's Tin Foil, Nos. 4, 5, 6, 8, and 10 . . .	"	38

COMPOSITION FILLINGS.

(When sent by mail, postage extra.)

Hill's Stopping, in oz. and ½ oz. packages (postage 9 and 6 cents)	per oz.	5 00
Roberts' Os Artificiel (postage free) per box		1 00
" " " (" ") Gum Color, per box		1 00
Oxy-Chloride of Zinc (postage 45 cents) 1 oz. package		4 00
" " (" 24 ") ½ "		2 00
" " (" 15 ") ¼ "		1 00
Lawrence's Amalgam (" 9 ") per oz.		3 00
Townsend's " (" 9 ") "		2 00
Luther's " (" 9 ") "		3 00
Walker's Excelsior Amalgam (postage 9 cents) per oz.		4 00

GOLD PLATE, ETC.

Gold Plate, 18 carats fine	per dwt.	$0 90
" 20 carats fine	"	1 00
" 22 carats fine	"	1 10
" Pure (Ribbon)	"	1 12
Gold Plate, 18 carats fine, alloyed with Platinum, for Clasps and Backings	per dwt.	90
Gold Wire, Round and Half Round, 18 carats fine	"	90
Gold Spiral Springs, 18 carats fine	"	1 00
" " 10 carats fine	"	60
Gold Solder, 18 carats fine	"	90
" 14 carats fine	"	75

SILVER PLATE.

Silver Plate made from Coin	per dwt.	08
" Pure	"	09
Silver Wire, Round and Half Round	"	09
Silver, precipitated, pure	per oz.	2 00
" granulated, pure	"	1 80
Silver Springs	per dwt.	15
Silver Solder	"	08

Gold and Silver Plate, etc. will be sold at the above prices in gold, or with the current rate of premium on coin added.

FRENCH AND ENGLISH PLATINUM PLATE AND WIRE,

Our own Importation; Warranted Pure.

IMPORTED TO ORDER FOR ALL USES.

Platinum, of an inferior quality, may be sold at a less price; Platinum is sometimes sold by Avoirdupois weight (18 dwt. 6 grs.), instead of Troy weight (20 dwt.), making the price appear lower than it really is. Remelted platinum, if offered for sale, will be represented as such.

Platinum Plate and Wire	per oz. Troy	$6 00
" " cut to pattern	" "	7 00
Platinum Pins for Blocks (all sizes)	" "	7 00
Battery Platinum rolled and cut to pattern	" "	7 50

Platinum will be sold at the above rates, with the current rate of premium on gold coin added.

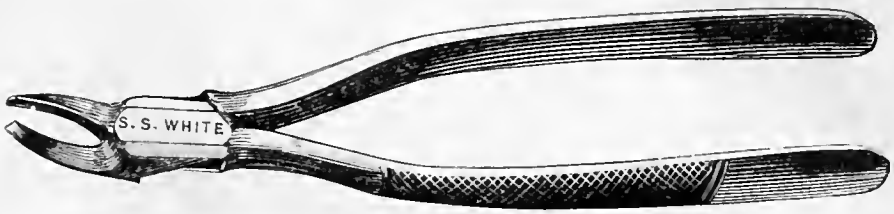
SAMUEL S. WHITE'S FORCEPS.

These Forceps, for quality and adaptation, are not excelled by those of any other manufacturer. A variety of shapes are here represented, from which the purchaser can select the instrument he may desire. In ordering, state the number of the cut. Our Forceps are *warranted;* and if they break, in the second or third application upon the proper tooth, will be exchanged without charge.

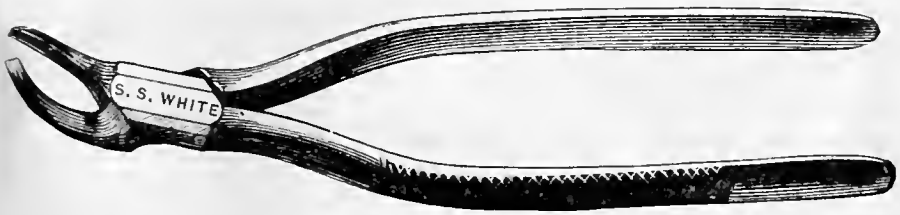
Octagon Joints, extra quality	per pair	$2 50
Oval Joints, first quality	"	2 00

ROOT FORCEPS.

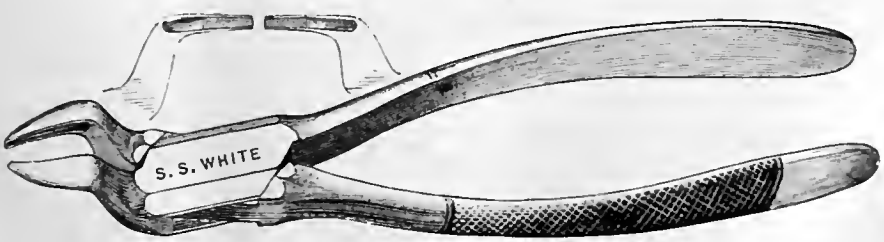
No. 1—Upper Front Root, straight.



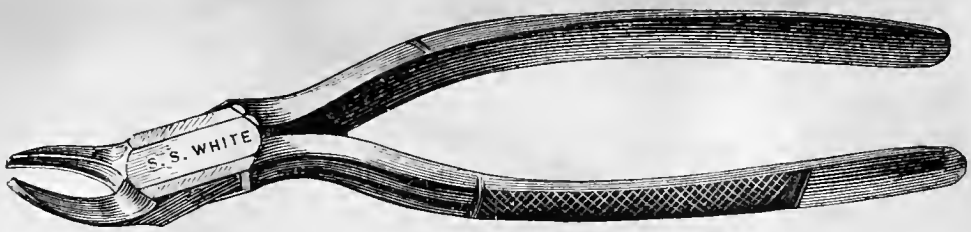
No. 2—Upper and Lower Root, half curved.



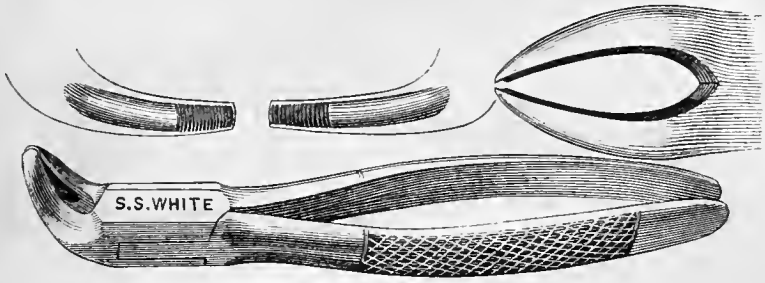
No. 3—Lower Root, full curved.



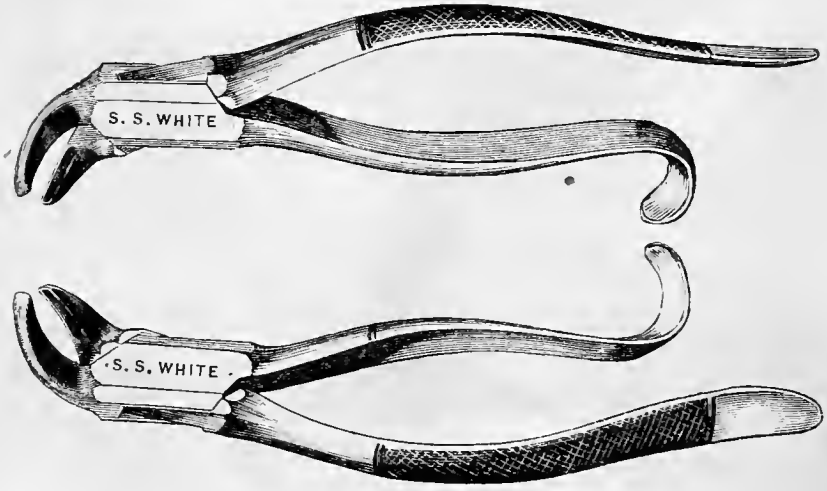
No. 35—Bayonet-shape Root.



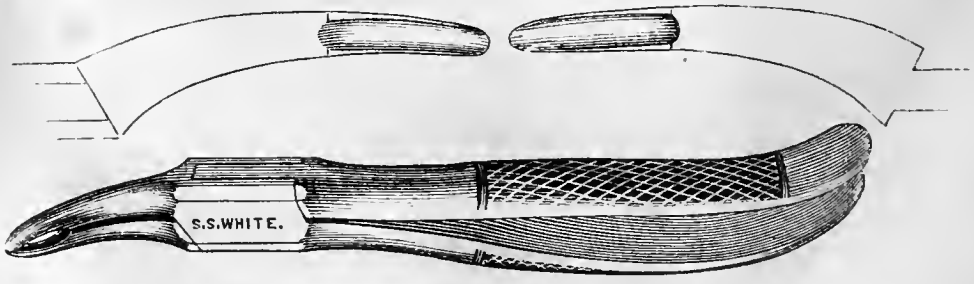
No. 7—Upper Back Root (universal).



No. 49—Lower Molar Root (with crowns).



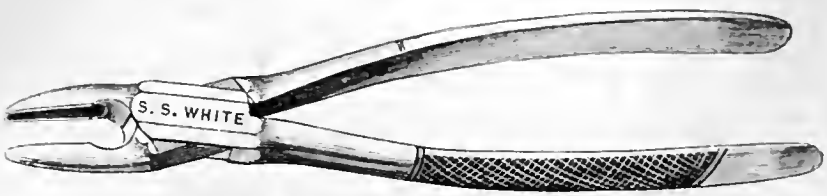
No. 50—Lower Root, right and left.



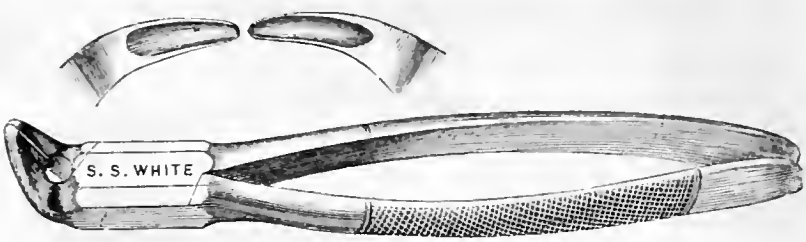
No. 63—Universal Spicula.

ALVEOLA FORCEPS.

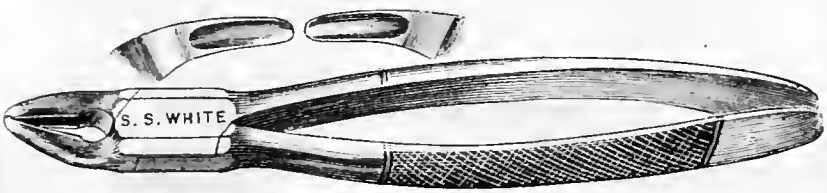
No. 32—Parmly's Bayonet-shape, Alveola.



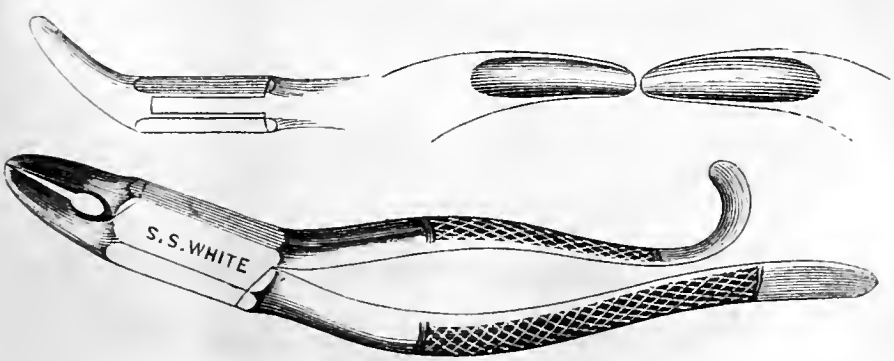
No. 33—Parmly's Straight Beak, Alveola.



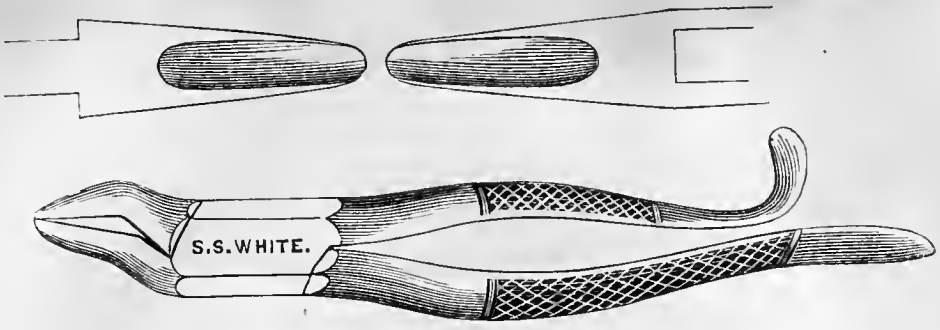
No. 34—Parmly's Curved Beak, Alveola.



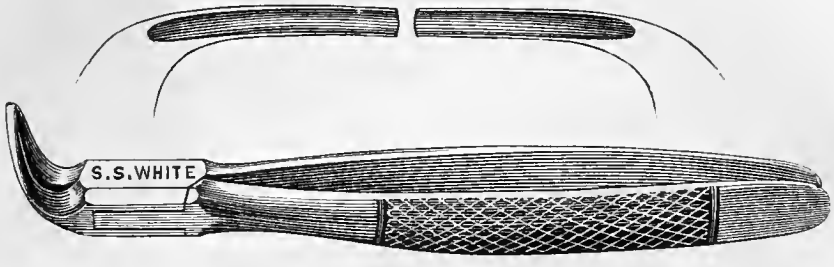
No. 39—Parmly's Half Curved, Alveola.



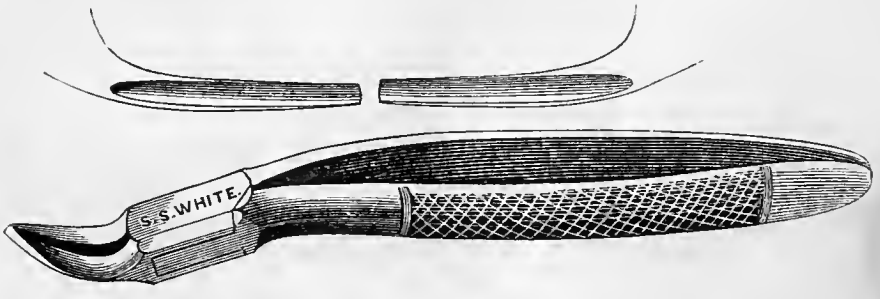
No. 52—Parmly's Lower, for either side, Alveola.



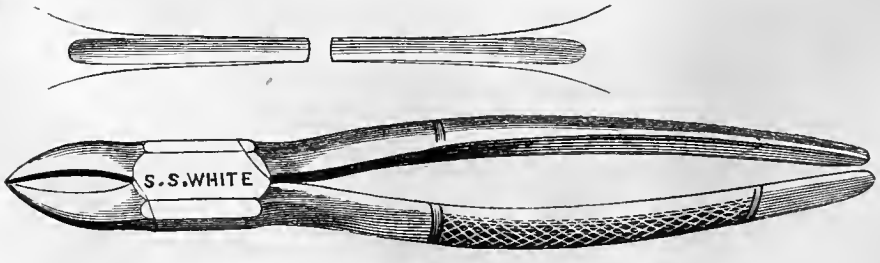
No. 58—Upper Incisor and Cuspids, Alveola.



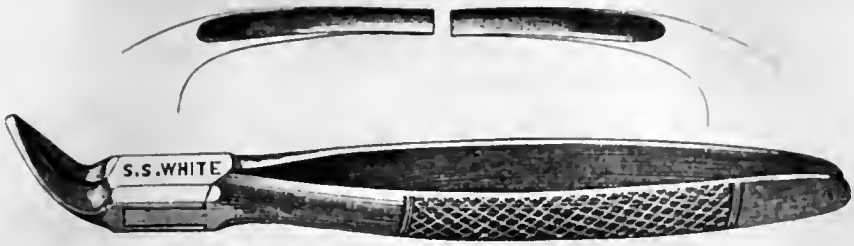
No. 41—Half Curved, Long Beak, Alveola.



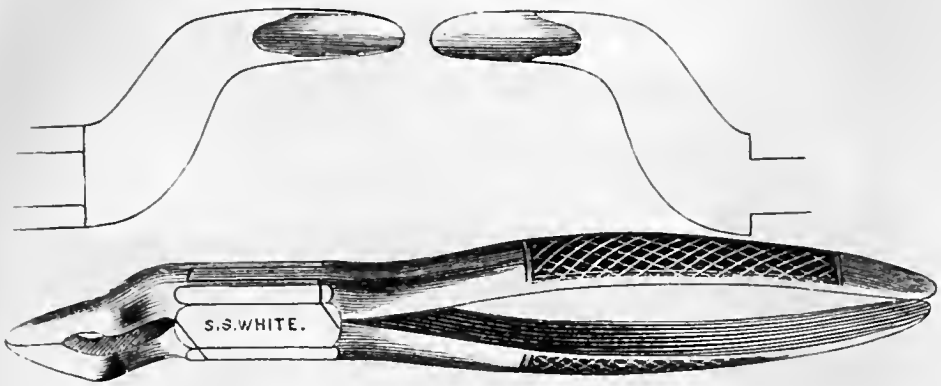
No. 42—Upper Back, Long Beak, Alveola.



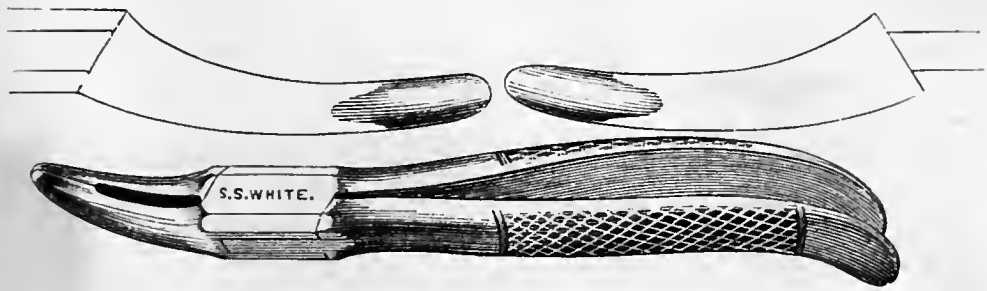
No. 43—Straight Long Beak, Alveola.



No. 44—Full Curved, Long Beak, Alveola.



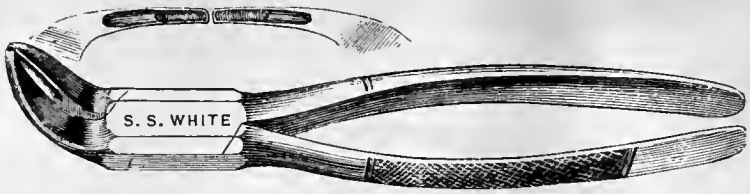
No. 61—Alveola Nipping, back, for cutting away process after extraction.



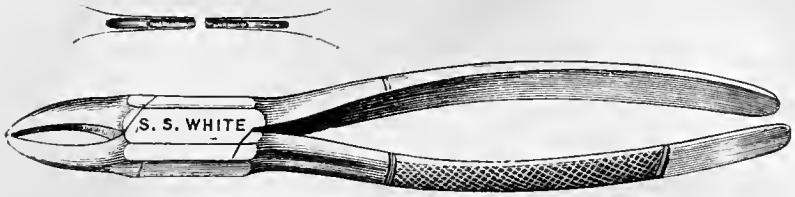
No. 64—Alveola Nipping, front, for cutting away process after extraction.

FORCEPS FOR CROWDED TEETH.

No. 36—Half Curved, Narrow Beak for crowded Teeth.

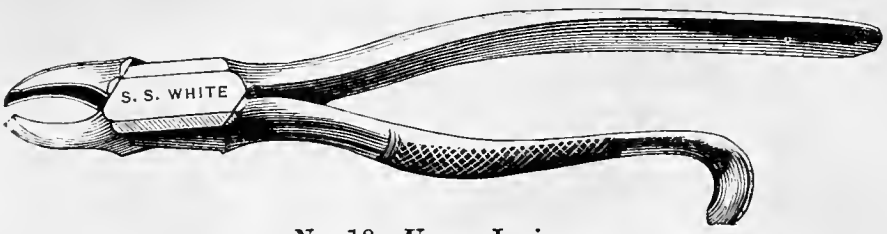


No. 37—Full Curved, Narrow Beak for crowded Teeth.

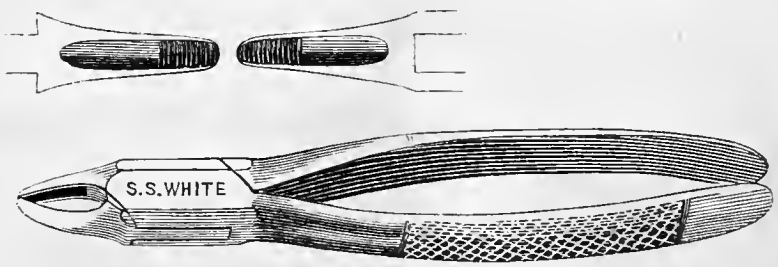


No. 38—Straight, Narrow Beak for crowded Teeth.

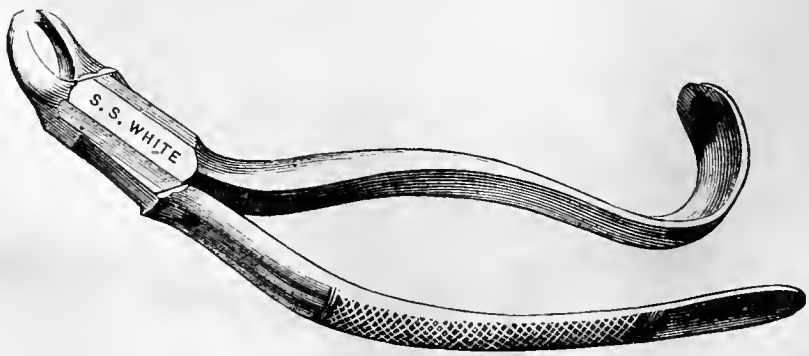
INCISOR FORCEPS.



No. 13—Upper Incisor.

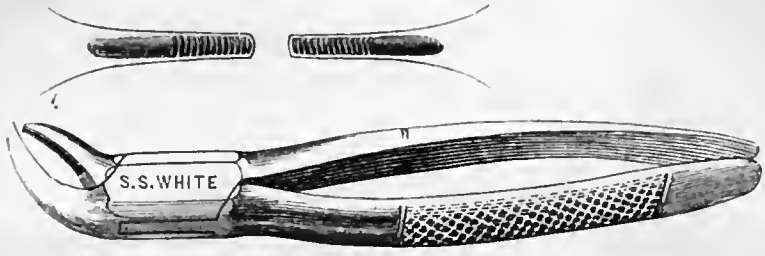


No. 48—Upper Lateral Incisor.



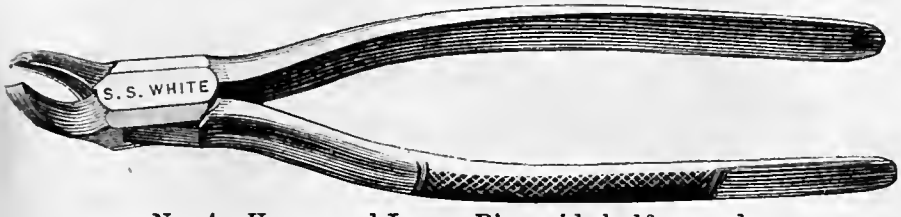
No. 9—Lower Incisor, Hawk Bill.

No. 14—Lower Incisor and Bicuspid, for either side.

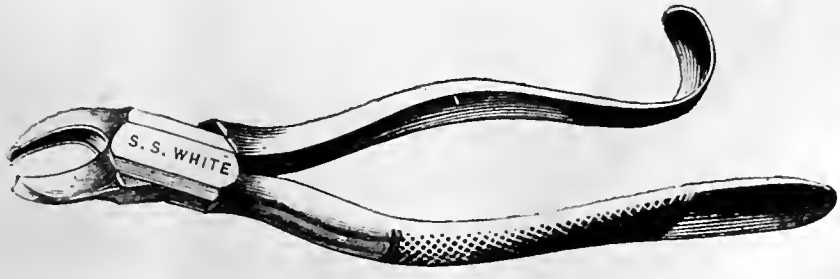


No. 46—Hawk Bill, Lower Incisor and crowded Teeth.

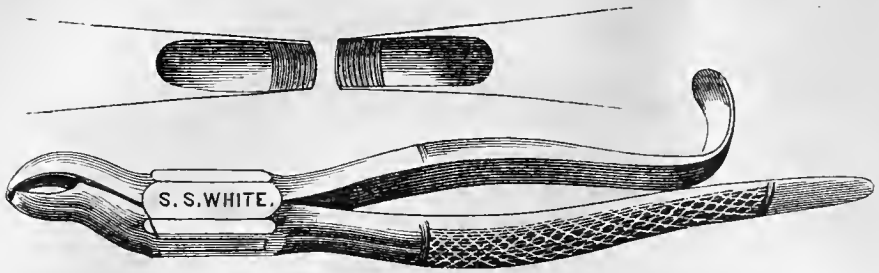
BICUSPID FORCEPS.



No. 4—Upper and Lower Bicuspid, half curved.

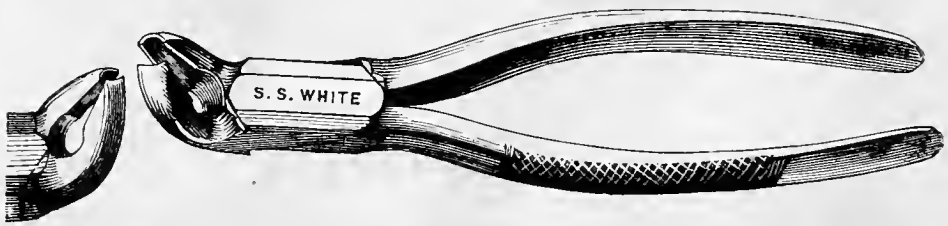


No. 11—Upper Bicuspid and Canine.

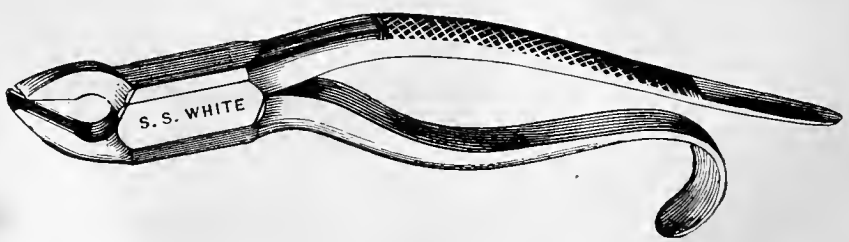


No. 40—Upper Bicuspid and Incisor.

No. 21—Lower Bicuspid and Canine.

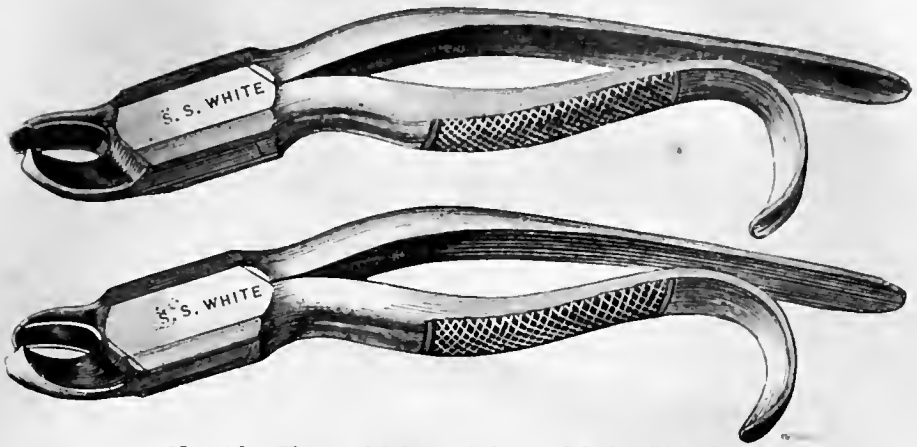


No. 25—Lower Bicuspid, Safety.

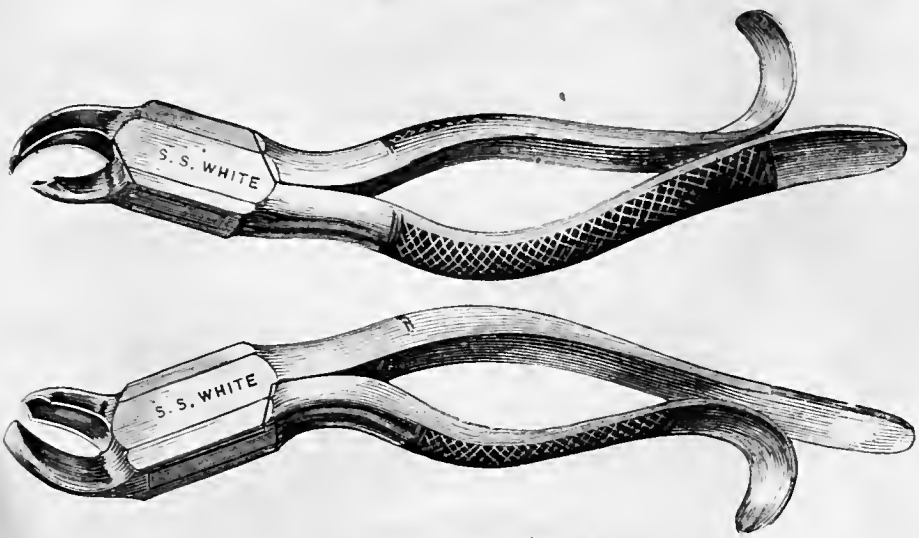


No. 26—Upper Bicuspid, Safety

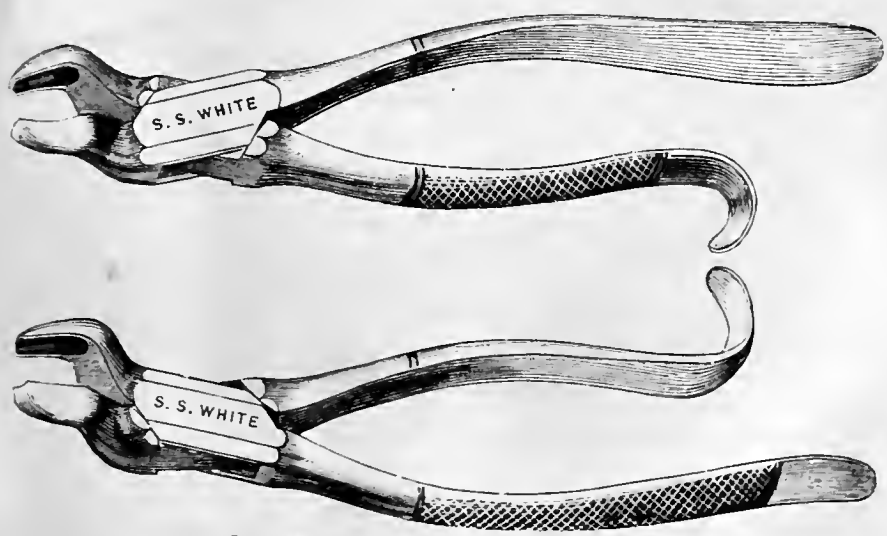
MOLAR FORCEPS.



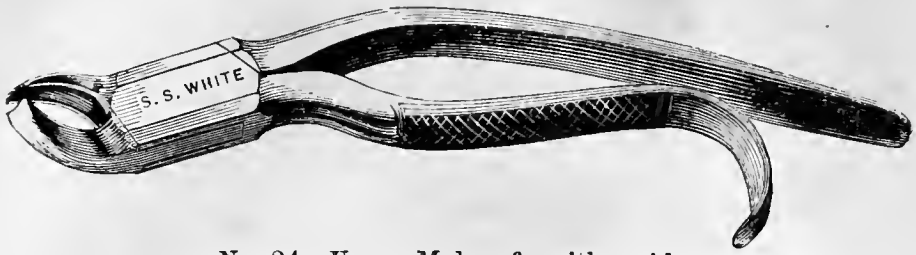
No. 18—Upper Molar, right and left (Harris').



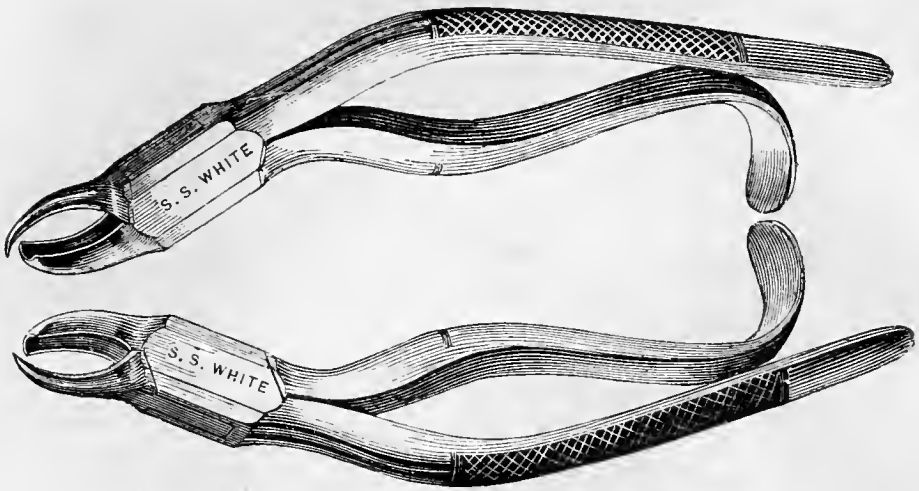
No. 19—Upper Molar, right and left.



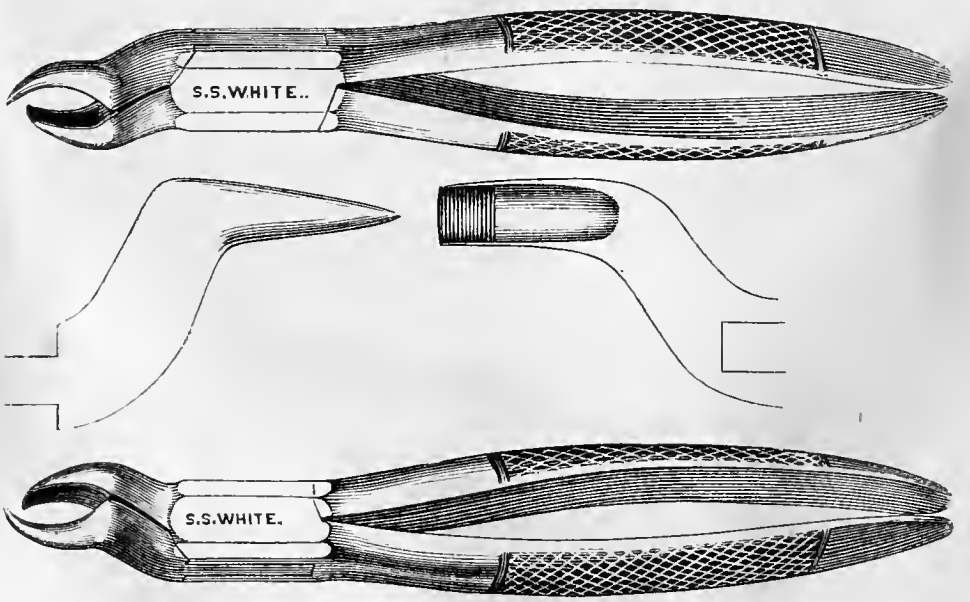
No. 53—Upper Molar, right and left.



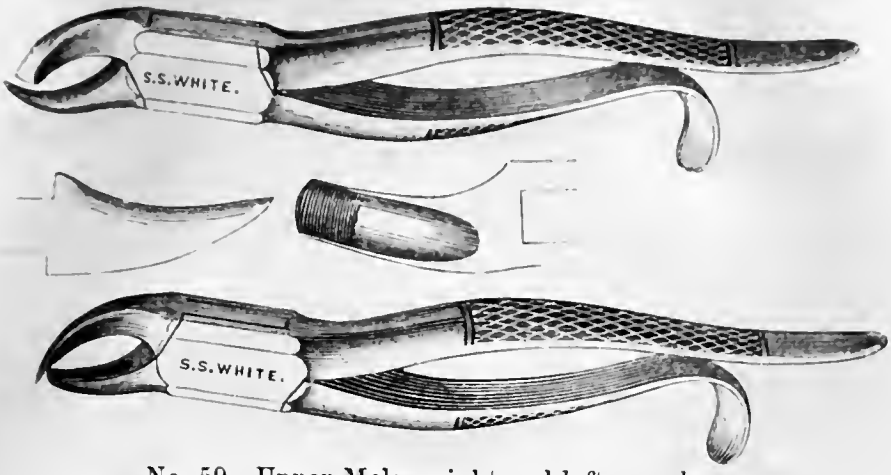
No. 24—Upper Molar, for either side.



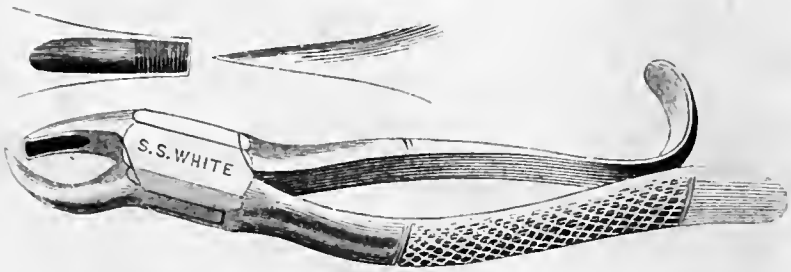
No. 20—Upper Molar, right and left, cow horn, which, with No. 16, makes an invaluable set for the extraction of Molar Roots when the crowns are decayed below the process.



No. 57—Upper Molar, right and left, cow horn, with or without hook on handle.

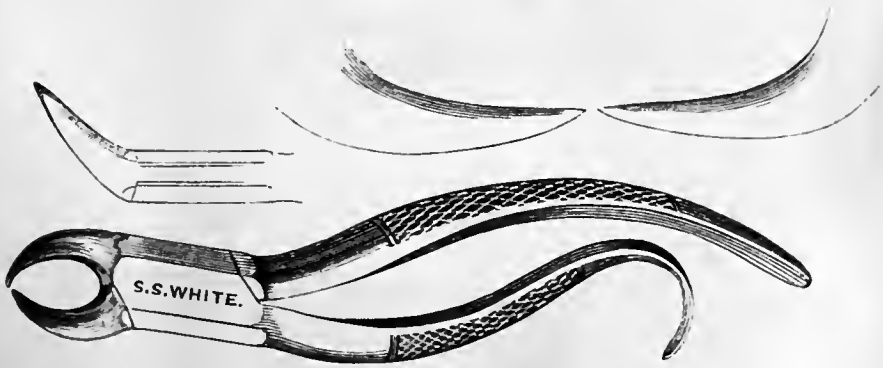


No. 59—Upper Molar, right and left, cow horn.

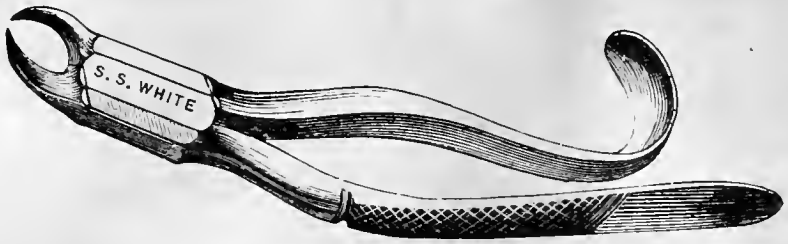


No. 45—Upper Molar, cow horn, either side.

No. 55—Lower Molar, cow horn, right side.



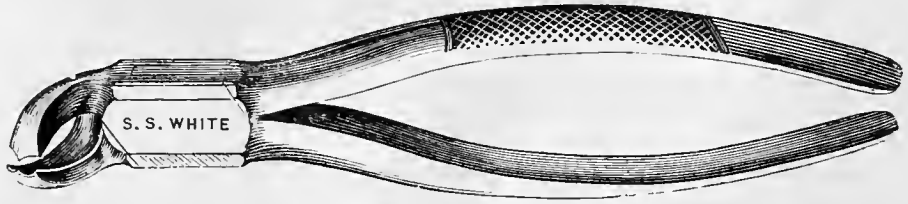
No. 56—Lower Molar, cow horn, for the left side. This Forcep, with the No. 55 for the right side, makes a very efficient set for Lower Molars.



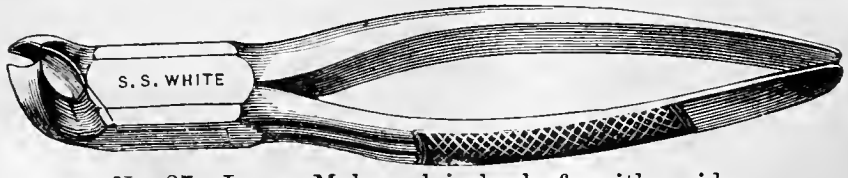
No. 16—Lower Molar, cow horn, either side.

No. 23—Lower Molar, cow horn, either side.

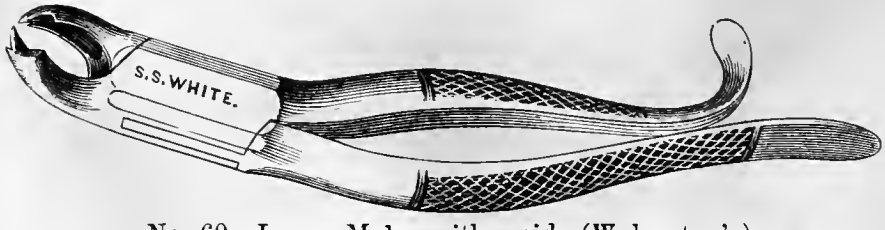
No. 15—Lower Molar, either side (Harris').



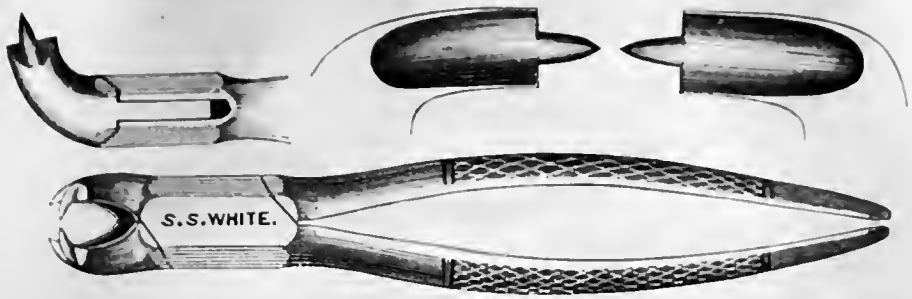
No. 17—Lower Molar, either side.



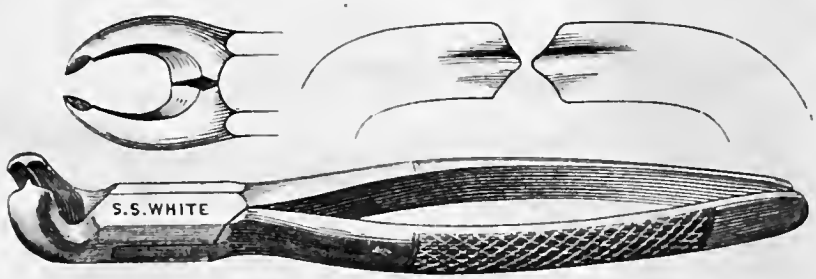
No. 27—Lower Molar, plain beak, for either side.



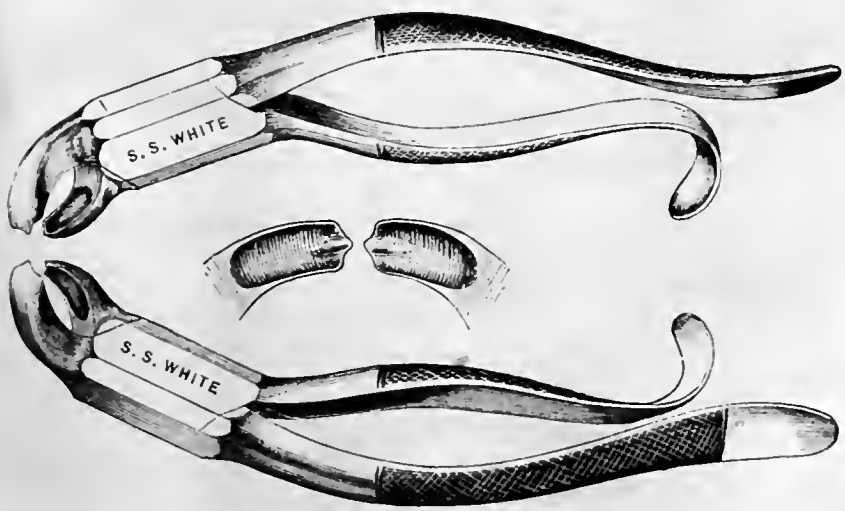
No. 60—Lower Molar, either side (Wolverton's).



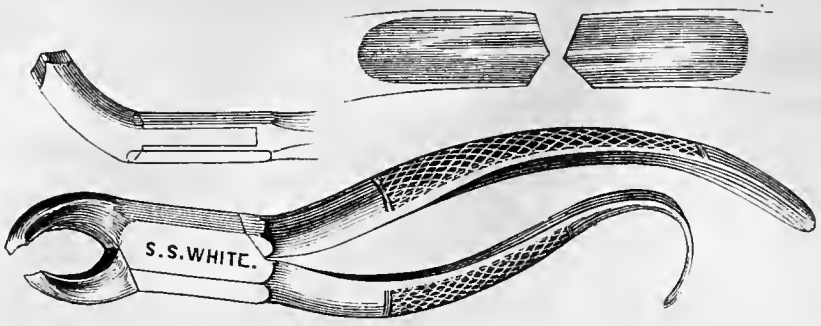
No. 51—Lower Molar, either side (Wolverton's).



No. 47—Lower Molar (Hutchinson's).

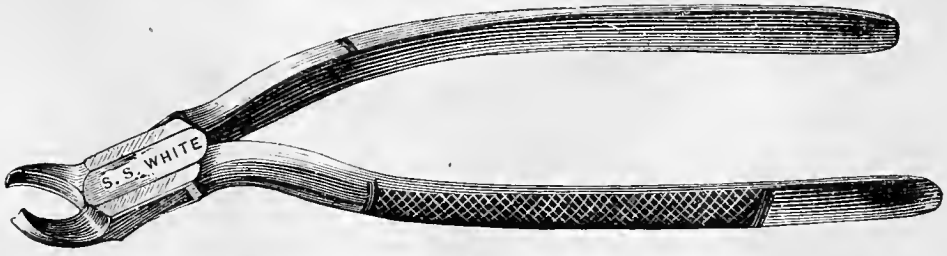


No. 28—Lower Molar, right and left.

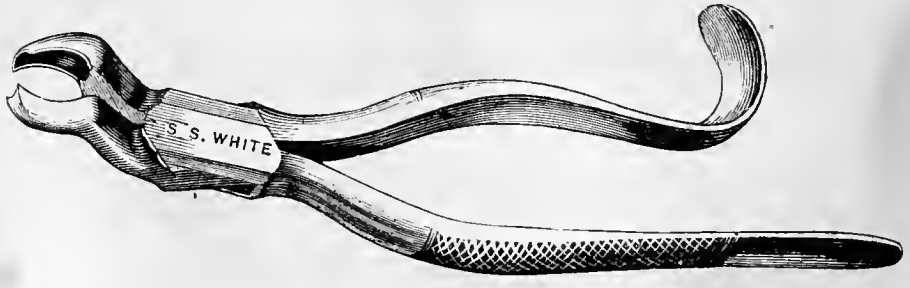


No. 54—Lower Molar, for the left side. This Forcep, with a No. 28 for the right side, makes a very efficient set for Lower Molars.

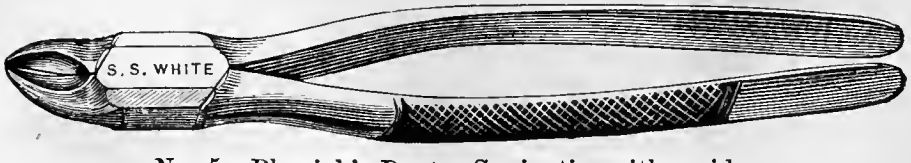
DENTES SAPIENTIÆ FORCEPS.



No. 8—Upper Dentes Sapientiæ, for either side.



No. 10—Upper Dentes Sapientiæ, for either side, with or without hook.



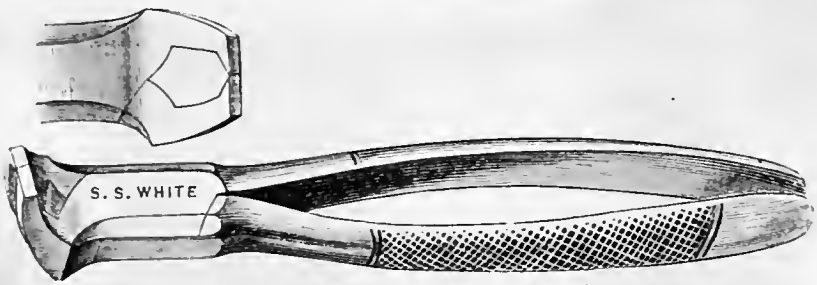
No. 5—Physick's Dentes Sapientiæ, either side.

No. 22—Lower Dentes Sapientiæ, either side.

SEPARATING AND EXCISING FORCEPS.

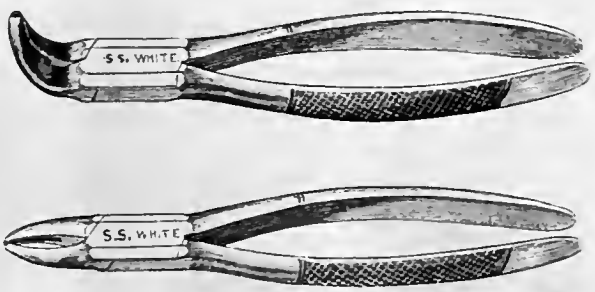
No. 6—Separating.

No. 12—Upper Excising.

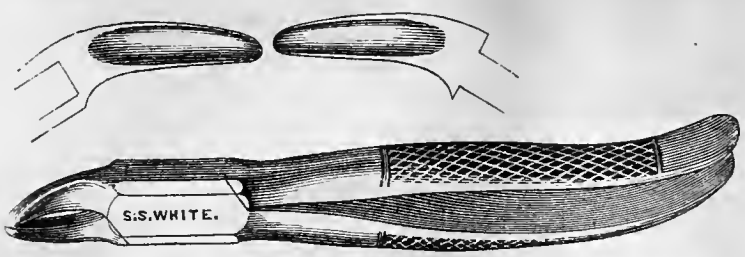


No. 31—Excising, curved beaks.

CHILDREN'S FORCEPS.

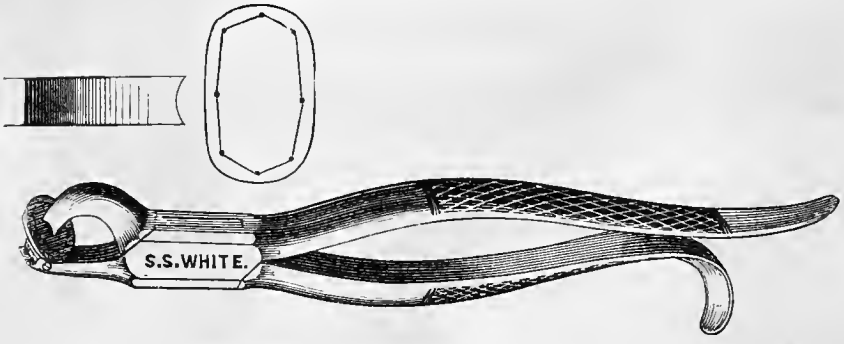


Nos. 29 and 30—Curved and Straight, for Children's Teeth.

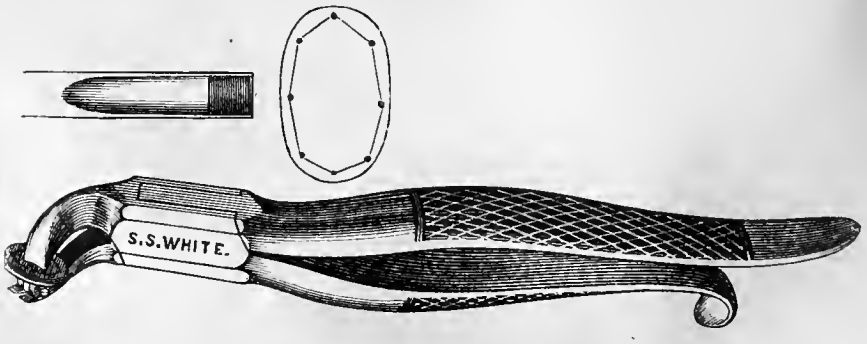


No. 62—Child's, and Universal Root.

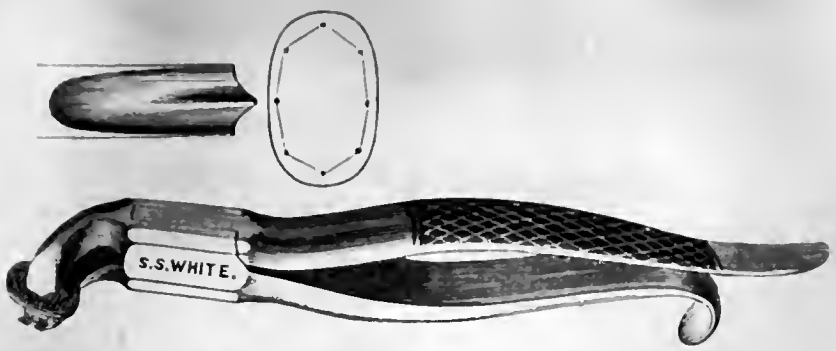
FULCRUM FORCEPS.



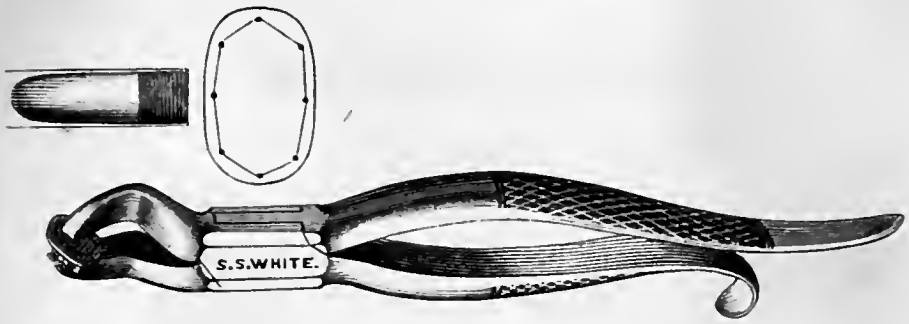
No. 1—Upper Incisors, Cuspids and Bicuspids, for either side of the Mouth.



No. 2—Lower Incisors, Cuspids and Bicuspids. Two pair, one for the right, and one for the left side of the Mouth.



No. 3—Lower Molar. Two pair, one for the right, and one for the left side of the Mouth.

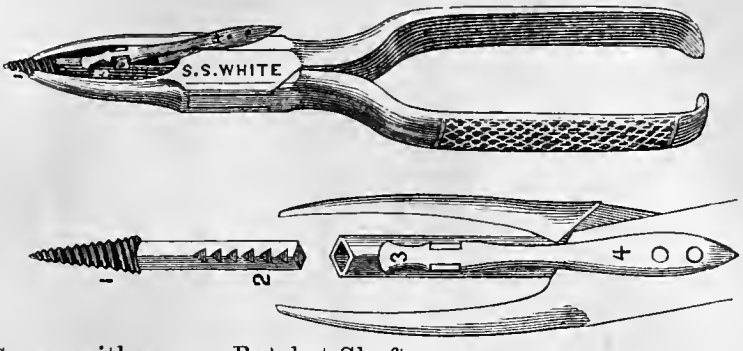


No. 4—Upper Molar. Two pair, one for the right, and one for the left side of the Mouth.

Seven pair of Fulcrum Forceps constitute a set. The Plate, which is the size shown in the cut, is attached to the lower beak by a hinge, and is covered by an India-rubber pad or cushion, about one-eighth of an inch thick, secured by fine wire. In extracting with Nos. 1, 2, and 3, the pad is placed on the inner gum, with No. 4 on the outer gum.

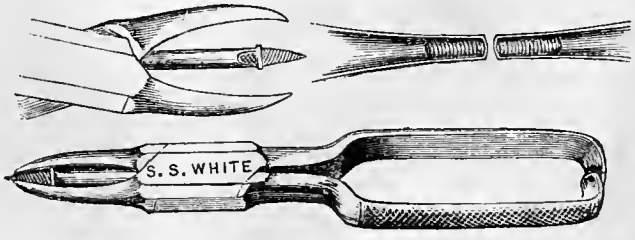
Per set	$30 00
" pair	4 50

DUBS' SCREW FORCEPS.



1. Conical Screw with square Ratchet Shaft.
2. Beaks of Forceps, grooved inside.
3. Socket with square hole to receive Shaft.
4. Spring Trigger by which the Screw can be detached at pleasure, at any given point . . . . . per pair $5 50

HULLIHEN'S SCREW FORCEPS.



Hullihen's Screw Forceps, Octagon Joint . . . . . per pair 3 75
" " " Oval " . . . . . " 3 25

MISCELLANEOUS FORCEPS.

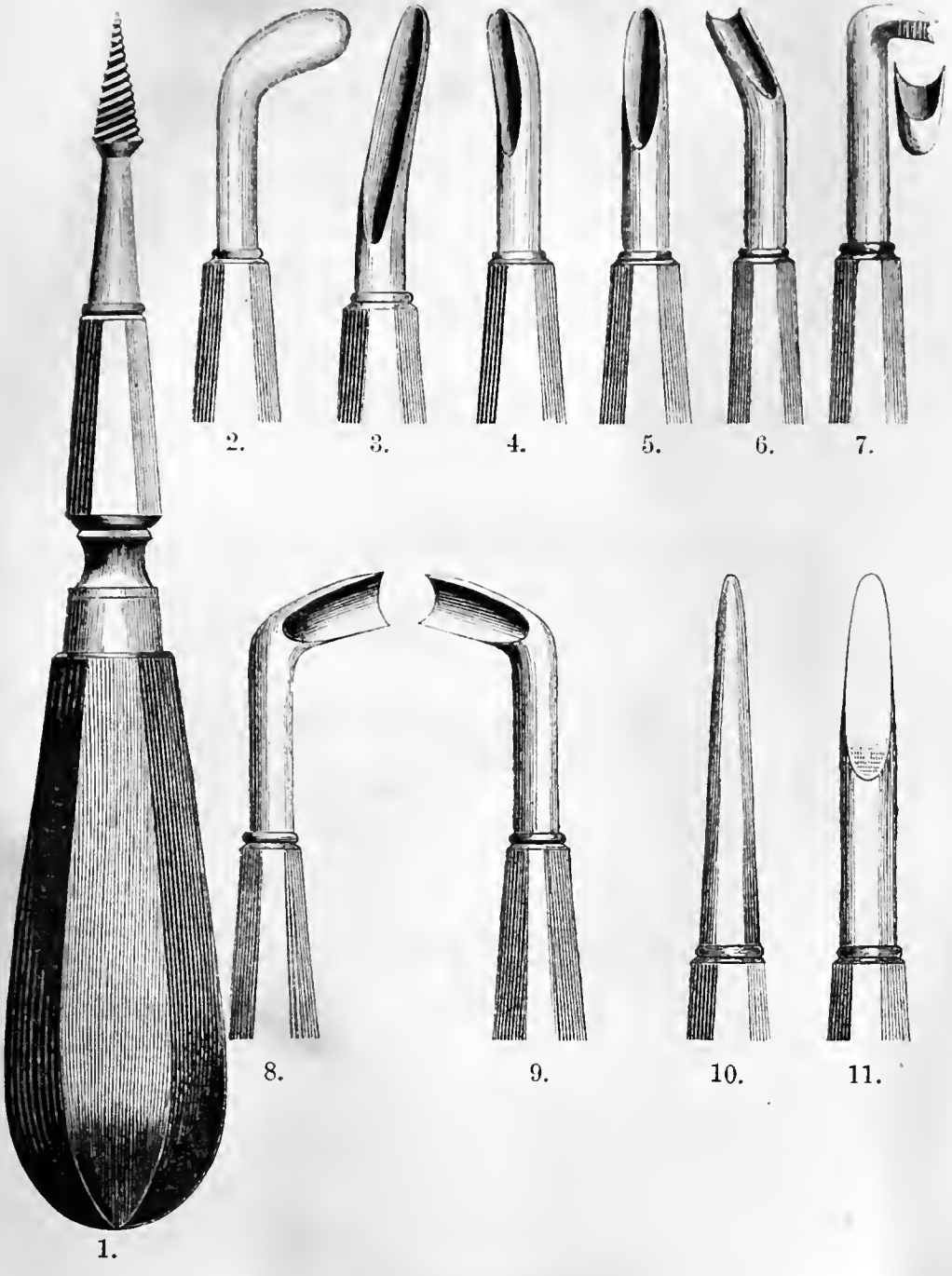
Children's Octagon Joints (cuts 29 and 30) . . . . . per pair 2 00
" Oval " " " " " " . . . . " 1 75
Physicians' Forceps (see Dental Cases.)
Plating Forceps with Silver to order . . . . . " 1 25
Garnet Settings put in Forceps to order . . . . . " 1 00

TURNKEYS.

Various Patterns.

Ebony Handle . . . . . each 2 00
Ivory " . . . . . " 3 00

STUMP EXTRACTORS.



Screws, Punches, Hooks, and Elevators:

Instruments, round, with large round Ebony Handles . . each $0 63
" octagon, " octagon Ebony Handles, as per cuts " 1 25

Instruments, octagon, with large round Ivory Handles .	each	$2 00
" " " octagon " " . .	"	2 25
" " " " Cameo Handles, Gold Ferrules	"	4 00
" " " " Pearl " " "	"	6 00

Other styles made to order.

PLUGGING FORCEPS.

Many Forceps have been sold, purporting to be made according to Dr. J. D. White's patterns, which have not been correct in shape; some of them so badly constructed as to be entirely useless.

The set consists of seven Forceps . . . . . each 2 00

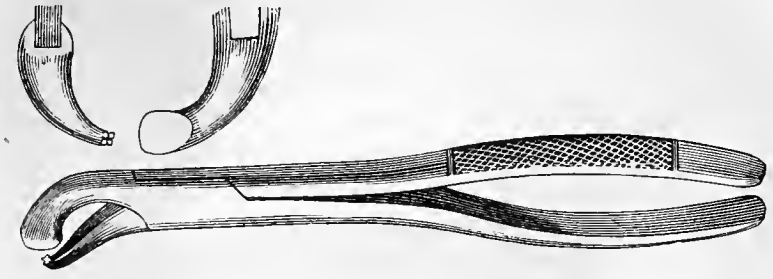


Fig. 1—Represents one of a pair, right and left. This instrument is six inches long; the handles are compressed three inches from the beaks, so that they will not be cumbersome in the mouth; one beak is flat, with a copper nail riveted into it; the other beak is smaller, and slightly curved, terminating like an ordinary condensing plugger with a serrated point. These Forceps are for plugging the buccal cavities of the inferior molars, and, in some cases, the superior molars.

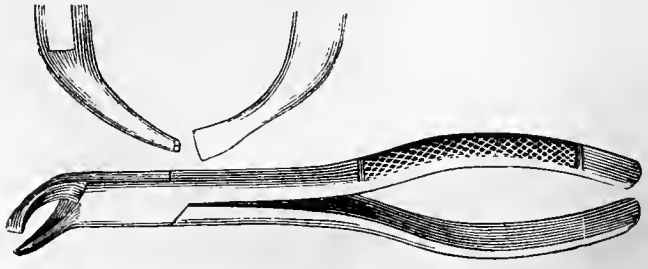


Fig. 2—Represents one of a pair, right and left, five and a half inches long, not quite so heavy in structure as Fig. 1. The beaks are flatter. They can be used for the places referred to above, but are principally used for the anterior and posterior surfaces of the inferior molars and bicuspids.

Fig. 3—Is a Forcep five and a half inches long, one flat and one pointed Beak. It is used principally for the upper teeth, front or back parts of molars, bicuspids, and canines. The condensing Beak is a little longer than the counter Beak, and slightly serrated on the point.

Fig. 4—Is a Forcep six and a half inches long, the Handles well compressed, four inches from the Beaks, so as not to be in the way of the chin when using it. It is used on all the front teeth, canines, bicuspids, and molars, as far back as it can be applied; the condensing Beak is serrated, and as small as an ordinary plugger for soft foil; the counter Beak is flat, with a copper nail riveted in.

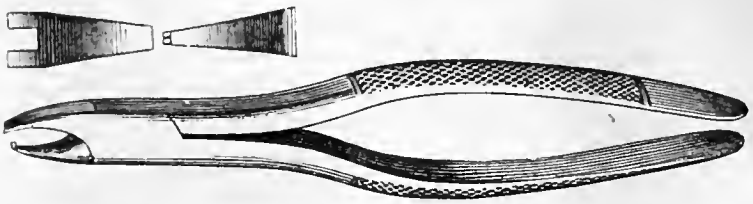


Fig. 5—Is a straight Forcep, five and a half inches long, with the packing Beak a very little shorter than the counter Beak. It is used principally for the superior bicuspids and canines when the plug extends close up to the cusps.

Plugging Forceps, Dr. Flagg's Patterns.

The set consists of three Forceps . . . . . each $2 00

Fig. 1—Is a straight Forcep used for condensing plugs between teeth, upon the mesial or lateral faces above or below, the plugs being located near the cutting edges of the incisors, the cusps of the cuspids or bicuspids, and the buccal *edges* of the *approximating faces* of the molars.

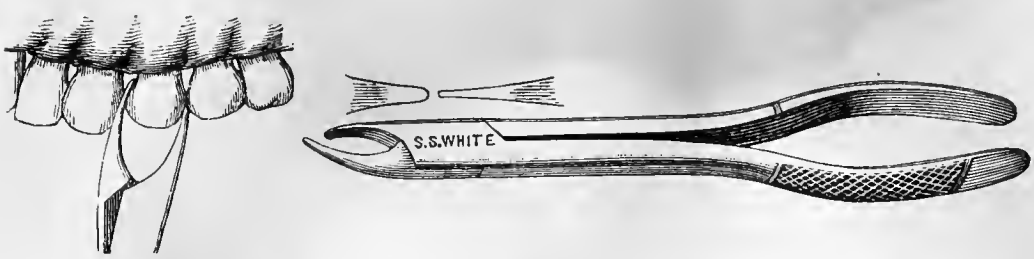


Fig. 2—Is used for condensing such plugs or parts of plugs as are located between incisors, cuspids, and bicuspids of the upper jaw near their necks, and the lingual or palatine *edges* of the approximal plugs as they may pertain to superior or inferior teeth.

Fig. 3—Is intended for condensing plugs upon the labial, palatine, and lingual faces of incisors and cuspids above and below, also upon the buccal, palatine, and lingual faces of bicuspids and molars above and below, right and left sides.

These Forceps combine ease of adaptation, lightness, delicacy of form, and strength sufficient to compact a plug.

LANCETS.

Fixed Blades.

Ivory Handle			$0 75
Ebony	"		50
Steel	"	File-cut	50
"	"	Abscess (see page 90) per pair	75
Pearl	"	Star Pattern, two Rosettes	4 00
"	"	Shell Pattern, single Rosette	3 50
"	"	Dolphin Pattern, "	3 35
"	"	" without Rosette	3 20
"	"	Plain, Silver Ferrule	2 00
"	"	Fish Pattern	3 20

POCKET LANCETS.

Shell Handle,	one	Blade,	without Spring		63
"	"	"	"	with Spring	1 25
"	"	"	"	with Stop	1 25
"	"	two	"	with Spring	2 00
"	"	three	"	" "	3 00
"	"	two	"	one in each hand, with Stop	2 50
"	"	"	"	Curved Bistoury and Tenotome Knife	3 50

INSTRUMENTS.

In the manufacture of Dental Instruments, our facilities are not surpassed by any establishment in the country. We import the best quality of Steel in large quantities, made to order in special shapes and sizes, expressly for our use; procure Ivory, Ebony, Pearl, Cameo, and fancy Woods direct from first hands; have secured skilled workmen in each department connected with their manufacture; provided machinery peculiarly adapted to the work, and are thus enabled to furnish the finest quality of Instruments at moderate prices. Being made under our own supervision, we guarantee their quality, and invite comparison with those of other manufacturers. Special attention given to repairing, repointing, and retempering Instruments. Where the Steel is of good quality, they can be repaired so as to be equal to new.

PLUGGING INSTRUMENTS.

Steel Handles, Octagon, plain	per doz.	$3 00
" " " taper	"	4 00
" " " " File-cut	"	5 00
" " " File-cut, $\frac{1}{4}$ inch (Kern's)	"	5 00
" " " " $\frac{1}{4}$ " best quality	"	6 00
" " " " $\frac{3}{8}$ "	"	7 50
" " " Dr. Atkinson's (Mallet)	"	4 00
" " " Dr. Abbott's (Mallet), polished ends	"	5 00
" " " Dr. Darby's, File-cut, $\frac{1}{4}$ inch, in Sets	"	6 00
" " " Dr. Lamm's, for Fibrous Gold, $\frac{1}{4}$ inch, File-cut	"	6 00
" " " Dr. Forbes' Right and Left Pluggers for Mallet (Sets of 6)	"	4 00
* Ivory Handles, Octagon, taper, $\frac{3}{8}$ inch, German Silver Ferrules	"	12 00
* " " " " $\frac{1}{2}$ " " " "	"	15 00
* " " " " $\frac{5}{8}$ " " " "	"	18 00

Coin Silver Ferrules add $2.00, $2.50, and $3.00 per dozen, to the above prices.

* The figures adopted by manufacturers do not generally express the real size of the Handle. In most cases they are at least $\frac{1}{8}$ inch less than described. The sizes enumerated for Ivory Handles, are warranted to be correct, which should be remembered when comparing prices.

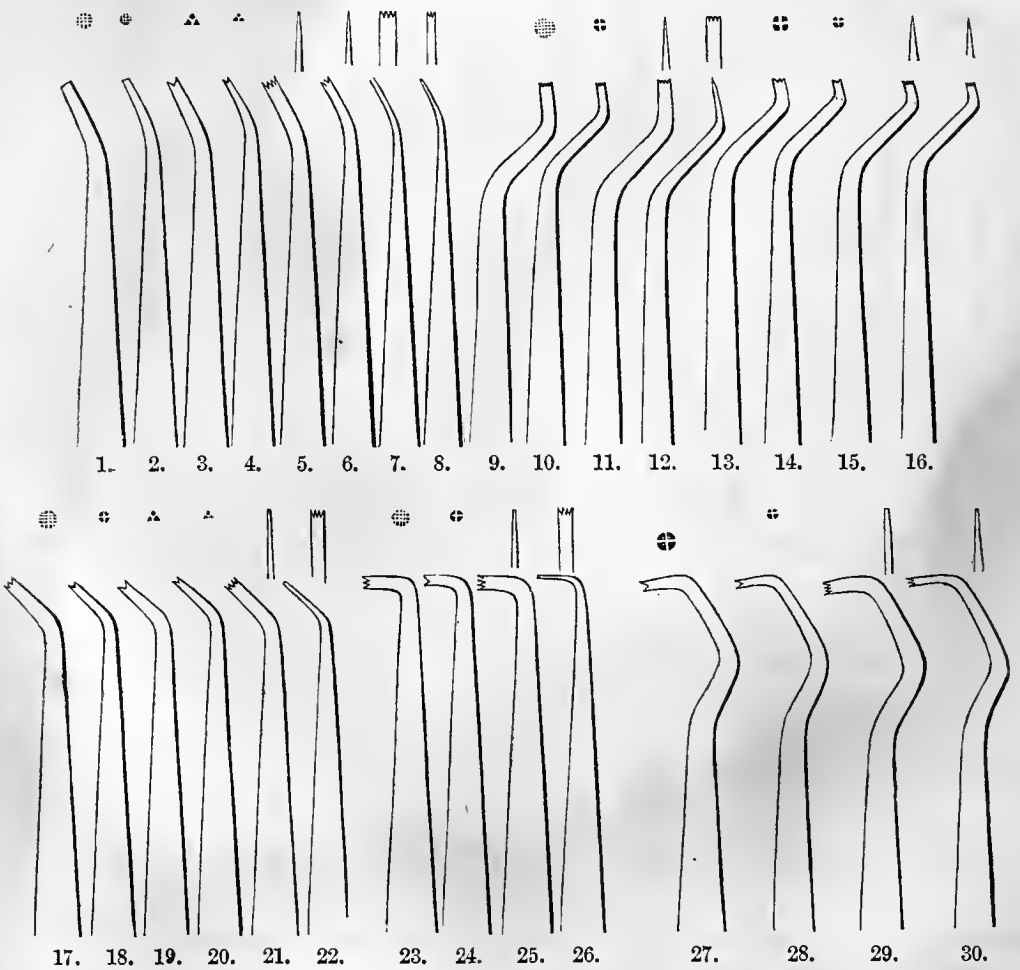
Bleached Bone Handles, Fluted,	$\frac{5}{8}$	inch	per doz.	$10 00
" " " "	$\frac{1}{2}$	"	"	7 50
Ebony Handles,	$\frac{3}{8}$	inch	"	7 50
" "	$\frac{5}{8}$	"	"	10 00
Pearl "	$\frac{5}{8}$	" Octagon, Gold Mounted	"	60 00
" "	$\frac{1}{2}$	" " " "	"	45 00
Cameo "	$\frac{5}{8}$	" " " "	"	35 00
" "	$\frac{1}{2}$	" " " "	"	30 00

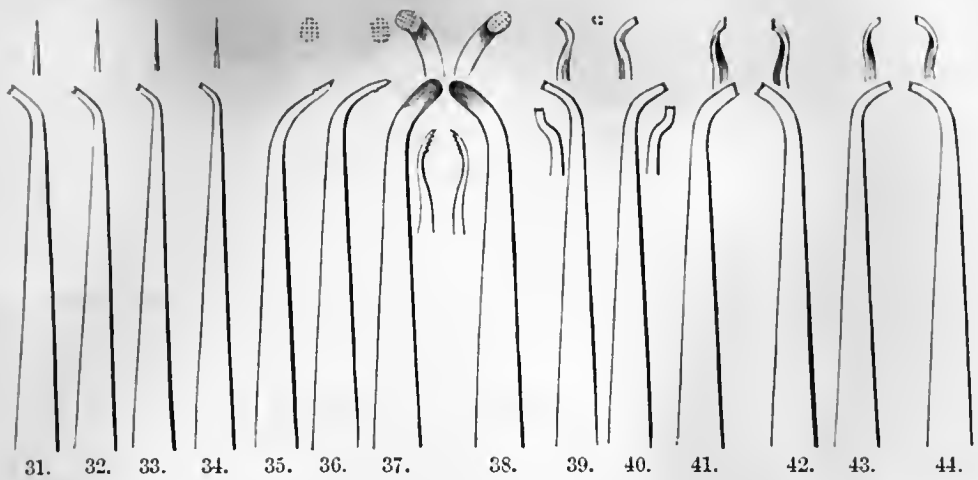
NOTE.—Solid Gold Ferrules, 16 carats fine, add $8.00 per dozen to the prices of Pearl and Cameo Handles.

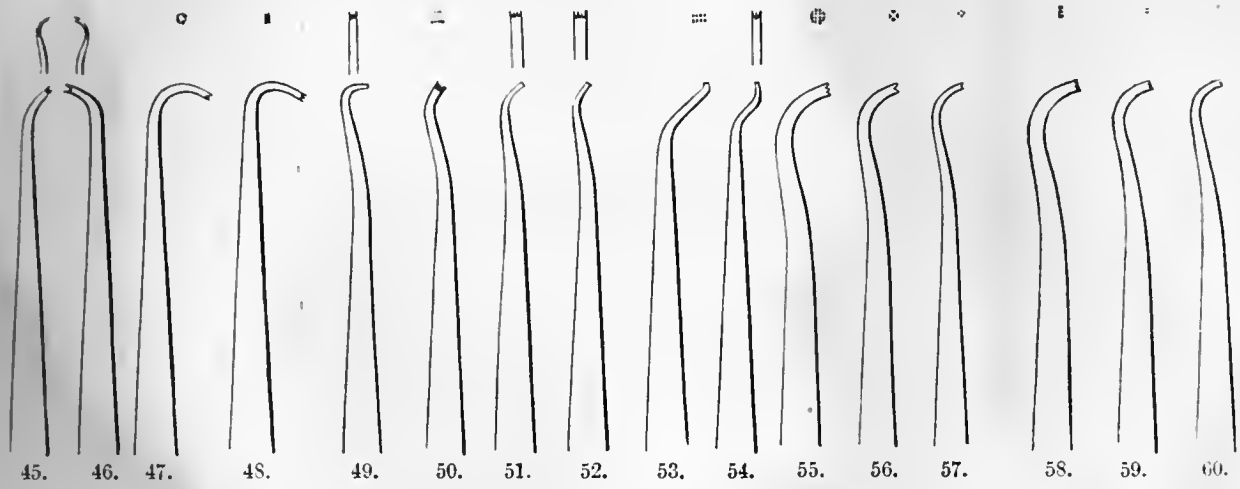
SET OF PLUGGERS.

These are $\frac{1}{4}$ inch File-cut Handles, turned Shanks and Ball ends. (See Cut on Page 56.) Sixty Points are given. They can be adapted to any style of Handles.

Per dozen 6 00







MALLET PLUGGERS.

Made from Patterns furnished us by Dr. Frank Abbott, N. Y.

The Instruments have been tested and approved by him. The Handles are Plain Octagon, with the Mallet end tapered and polished one and a half inches. Made of best quality Steel, the Points well tempered and nicely finished.

Per set of 30 Points $12 50
Inclosed in a Morocco Case 13 50

DR. ISAIAH FORBES' RIGHT AND LEFT (MALLET) PLUGGERS.

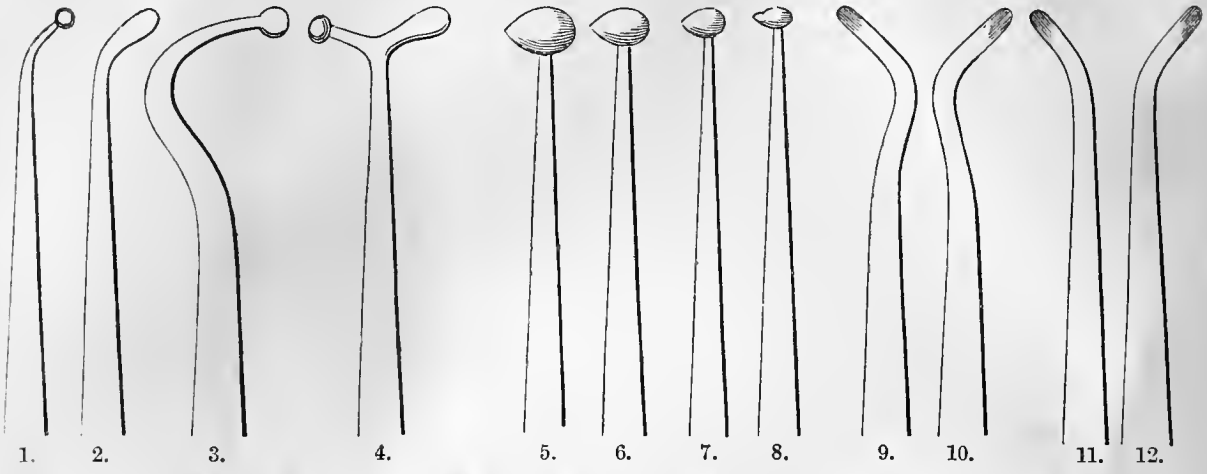
Plain Octagon three-sixteenth inch Handles. Three pair or six Points in a set.

Per set 2 00

SET OF BURNISHERS.

These are $\frac{1}{4}$ inch File-cut Handles, turned Shanks, Ball ends—12 forms are given. Can be made with any other style of Handle desired.

Per dozen $6 00



PLAIN OCTAGON HANDLE (MALLET) PLUGGERS AND BURNISHERS.

Dr. Wm. H. Atkinson's Points.

The set heretofore offered to the Profession contained 24 Points. Dr. Atkinson has added 36 *new forms*, including a full set of Burnishers, which increase the set to 60 Instruments.

A set of 24, selected from the full set, comprising the most marked varieties, has been made for the convenience of those wishing to test these Instruments.

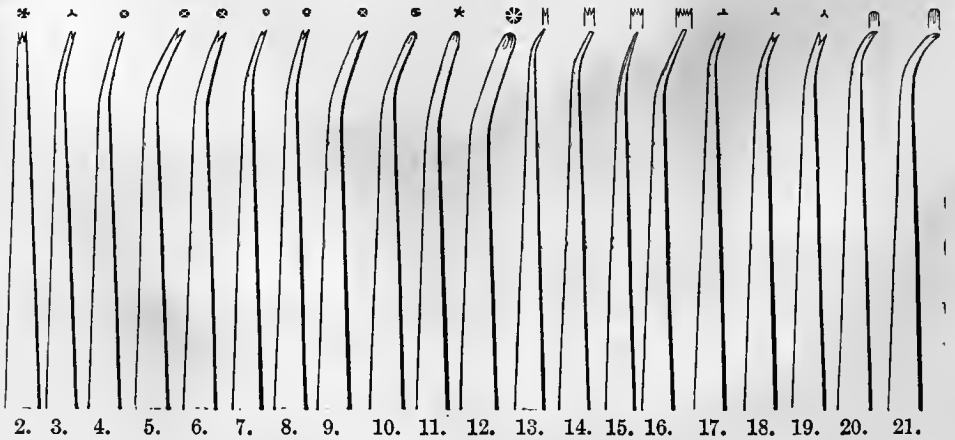
The Serrations are well defined and Points nicely finished.

Per set of 60 . . . . . $20 00

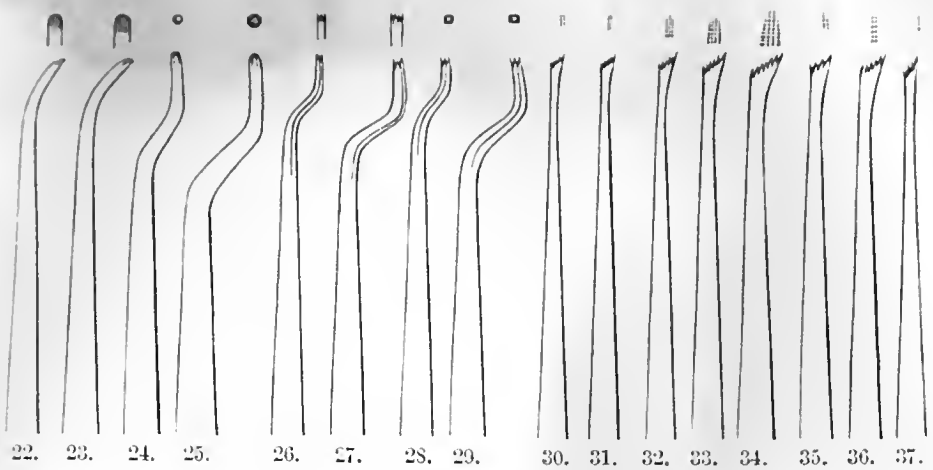
" " 24 . . . . . 8 00

These Instruments are designed to be used with the Mallet, and are *adapted* for that purpose, and approved by the Inventor.

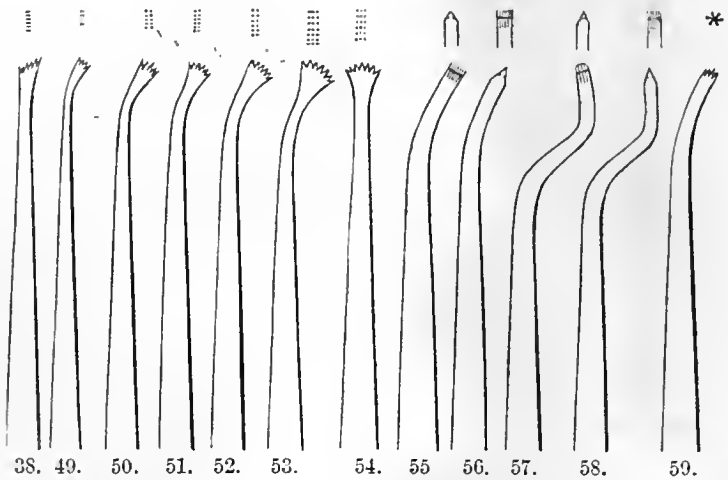
☞ There are many Instruments sold, bearing Dr. Atkinson's name, which are not correct copies of his Points, and not adapted to the style of work for which they are intended.



1.

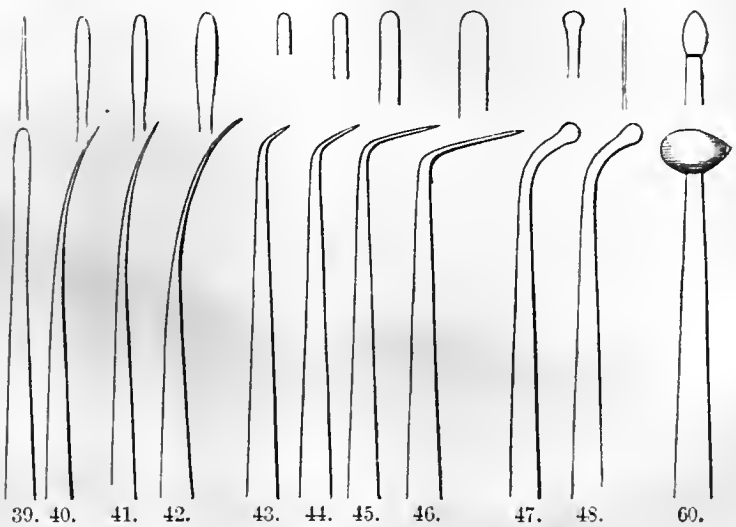


22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37.



38. 49. 50. 51. 52. 53. 54. 55 56. 57. 58. 59.

Dr. Wm. H. Atkinson's Set of Burnishers.



39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 60.

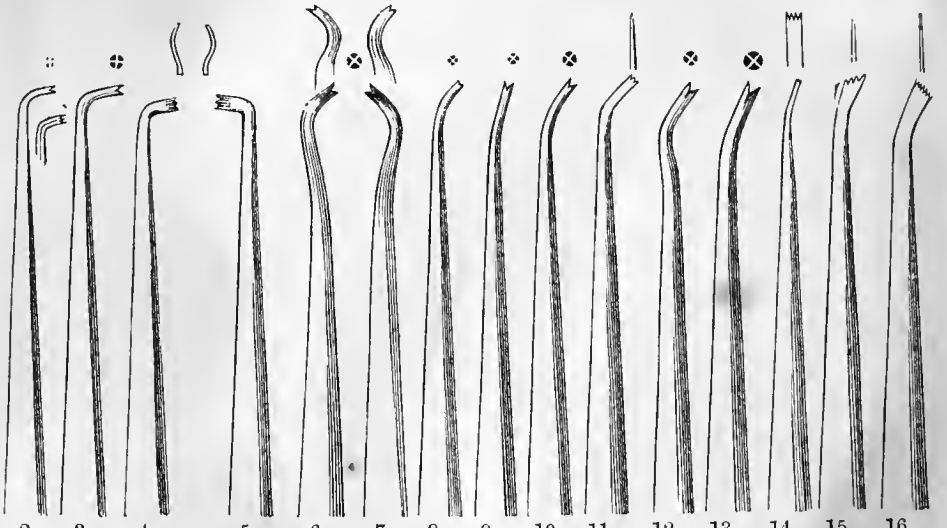
DR. E. T. DARBY'S PLUGGERS.

1.

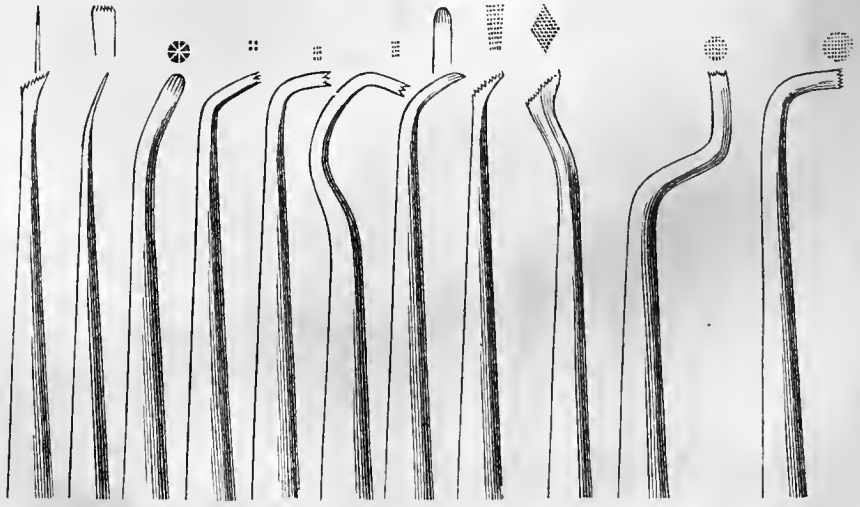
Dr. E. T. Darby, Demonstrator of the Pennsylvania Dental College, has presented us with a complete set of Points for Pluggers, Burnishers, and Chisels. The set of Pluggers, which are designed principally for *hand-pressure*, comprises 27 Points; set of Burnishers, 6 Points; set of Enamel Chisels, 12 Points.

These Instruments are of the finest quality, with File-cut Handles, turned Shanks and Ball ends. Each Instrument is numbered and can be duplicated by giving the number.

Set of Pluggers and Burnishers (33 Instruments) . . .	$16 50
The same inclosed in a Morocco Case	17 50
Set of 12 Chisels	6 00
The same inclosed in a Morocco Case	6 60



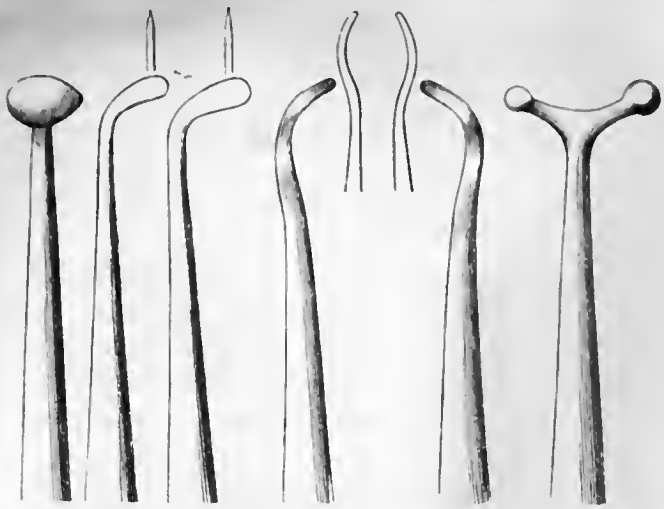
2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16.



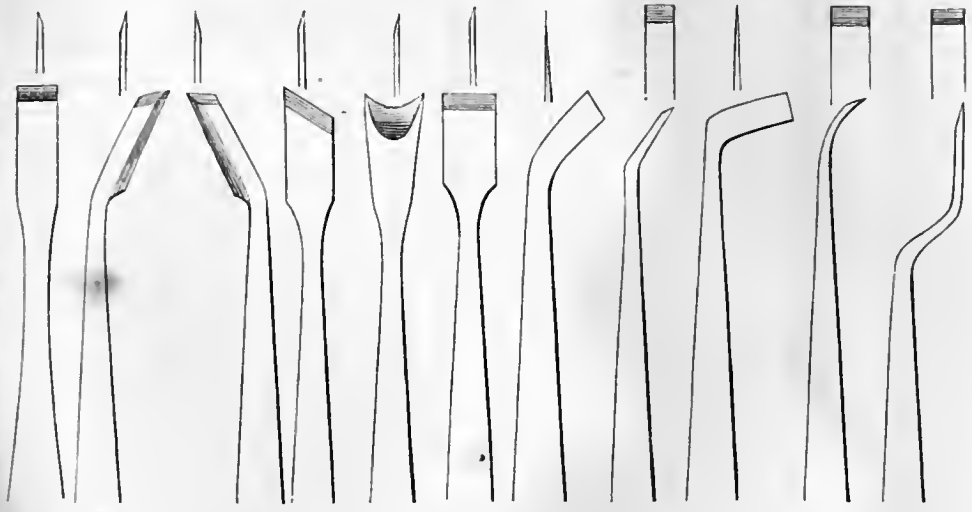
17. 18. 19. 20. 21. 22. 23. 24 25. 26. 27.

DR. E. T. DARBY'S BURNISHERS AND CHISELS.

1



28. 29. 30. 31. 32. 33.

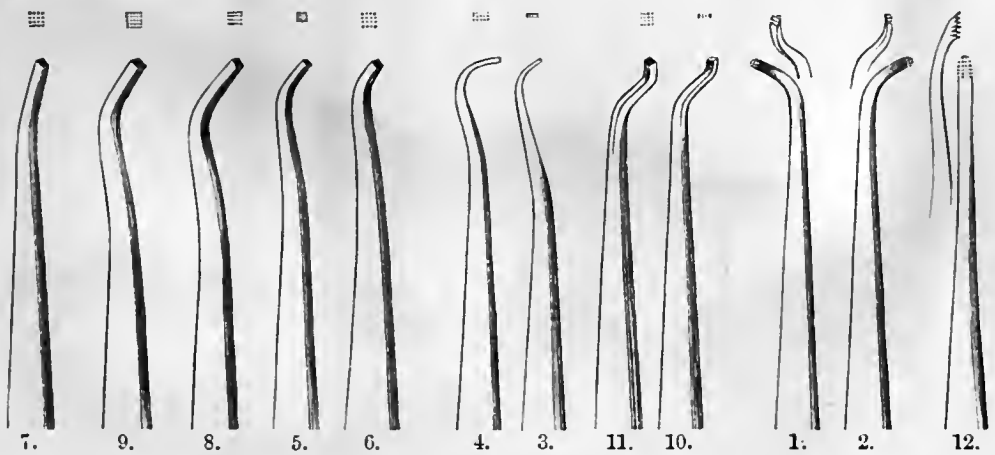


2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.

DR. E. LAMM'S PLUGGERS.

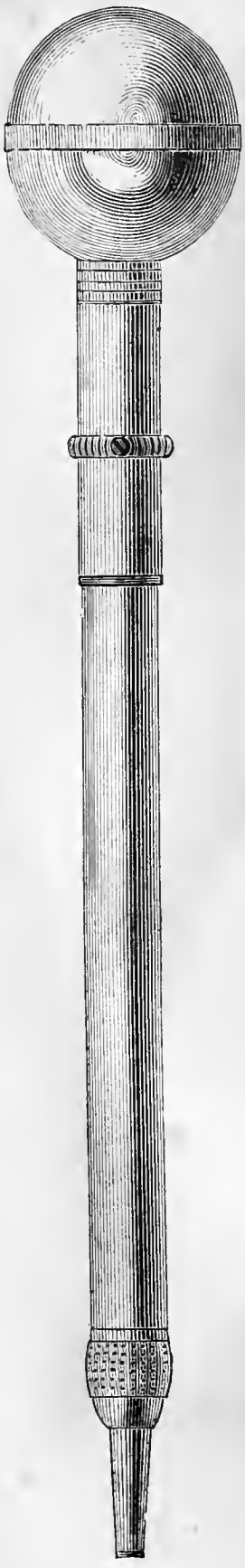
These Pluggers are designed for Lamm's Fibrous Gold. The Handles are $\frac{1}{4}$ inch, File-cut, with Ball ends and turned Shanks—intended for *hand-pressure.*

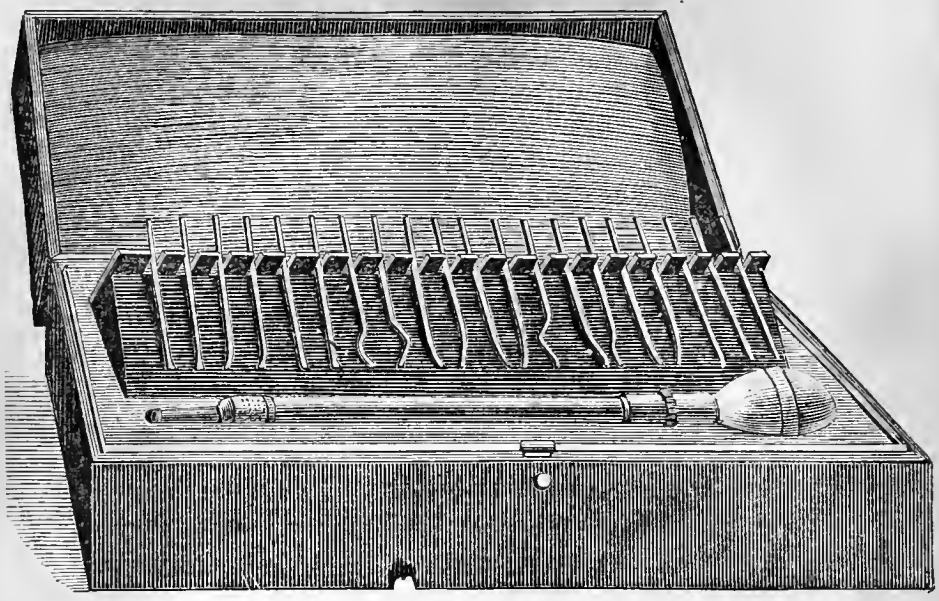
Per set of 12 Instruments $6 00



7. 9. 8. 5. 6. 4. 3. 11. 10. 1. 2. 12.

FOOTE'S AUTOMATIC MALLET FOR DENTAL PURPOSES.





It can be used wherever a Mallet can be, thereby saving an assistant.

The blow is easily regulated, being made heavy or light at the will of the operator.

It combines the advantage of hand-pressure, to which is added a blow, the impact of which equals the force of the pressure.

The force applied is always in the direction desired to condense the filling.

The Plugging Points are quickly and easily changed by means of the Rack.

The manipulations in filling or changing the Points are all done with one hand.

It can be used at pleasure as a hand-pressure instrument only, by resting the middle or index finger against the Tool-holder.

The machinery is simple, not liable to get out of order, inclosed within a case, and out of the way.

The Tool-holder is very small, receiving and communicating the force of the blow directly to the filling, without diffusing a large per cent. through a superabundance of metal.

The Tool-holder travels *only an eighth of an inch* to accumulate the force of the blow, thereby avoiding all unpleasant friction against the sides of the mouth, or unpleasant grating sounds against the tooth.

It materially lessens the labor and fatigue in filling teeth.

The sensation to the patient is more agreeable than either hand-pressure or malleting alone.

The value of the Rack consists in the facility with which, by its use, the operator can change the Points with one hand.

It is put up in a neat Morocco Case, lined with silk plush, containing a Rack and 20 Points, of various forms, to meet nearly all the changes required in plugging teeth.

TESTIMONIALS.

NEW YORK, March, 1866.

DR. G. F. FOOTE.—*Dear Sir:* We have been using your Automatic Plugger, and find it a great auxiliary to the Dental Cabinet.

The facilities for regulating the force of the blow and for changing the Points, the easy manipulations, and its effectiveness in use, together with the simplicity of its construction, particularly commend it to the intelligent Dentist who seeks the highest excellence both in the means and ends of our profession.

FRANK ABBOTT, DENTIST, 103 W. 11th St., N. Y.
WM. H. & A. W. ALLEN, 18 W. 11th St., N. Y.
JOHN ALLEN, 22 Bond St., N. Y.
C. P. FITCH, 113 9th St., N. Y.
T. G. WAITE, 263 4th Avenue, N. Y.
G. WALDO HILL, 119 E. 10th St., N. Y.
W. B. ROBERTS, 47 Bond St., N. Y.

NEW YORK, April 3d, 1866.

DR. G. F. FOOTE.—*Dear Sir:* From what I have seen and heard from those who are fully competent to judge and have practically tested your Automatic Plugger, I am convinced that it is a step in the right direction, and a valuable help to him whose ambition is to insert only first-class fillings.

Truly, W. H. ATKINSON, 109 Ninth St.

G. F. FOOTE, M.D.—*Dear Sir:* I find your Automatic Instrument a very valuable auxiliary to my practice.

In many cases it enables me to produce with ease and facility that high degree of solidity and finish in gold stopping so desirable in our art.

WILLIAM H. DWINELLE, M.D., 119 Tenth St.

Automatic Mallet of German Silver, with 1 Point	$10 00
Rack and Case	4 50
Twenty Points	5 50
Mallet, Rack, and Case, with 20 Points	20 00
Mallet, Electro-gilded, additional	4 00
Points made to order, adapted to the Automatic Mallet and Rack, per doz.	3 50

PLUGGING MALLETS.

A Large Supply of this Popular Instrument, in a variety of Forms.

Lignum Vitæ or Iron-wood Head, with Rosewood Handle. Head 1½ inches long by 1 inch in diameter . . . . . each	25
Vulcanized Rubber Head, with Ebony Handle. Head 1½ inches long by 1 inch in diameter . . . . . each	75

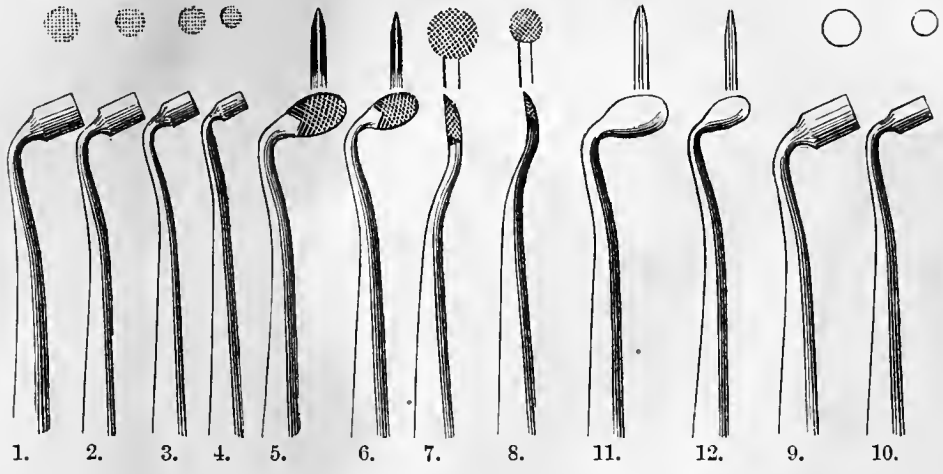
Vulcanized Rubber Head, with Snake-wood Handle. Head $1\frac{3}{4}$ inches long by $1\frac{1}{4}$ inches in diameter. A beautiful article. . . . . each $1 00

Dr. Colburn's Spring Attachment, one end of the Head plain, the other filled with Soft Rubber to modify the blow. Solid California Rosewood Head and Handle . . . . . each 1 25

AMALGAM PLUGGERS AND BURNISHERS.

One-quarter inch File-cut Handles, Ball ends. These Instruments are adapted to the use of Amalgam, Hill's Stopping, and Fusible Metal.

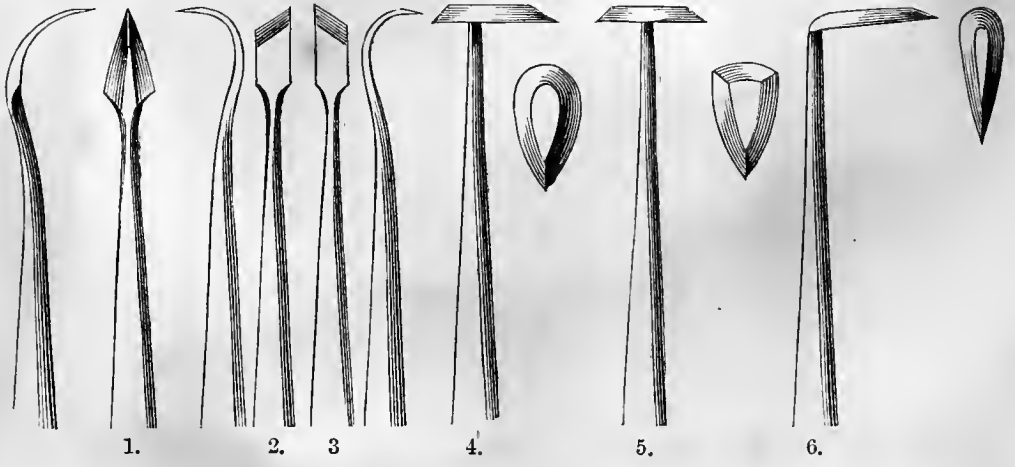
Per dozen 6 00

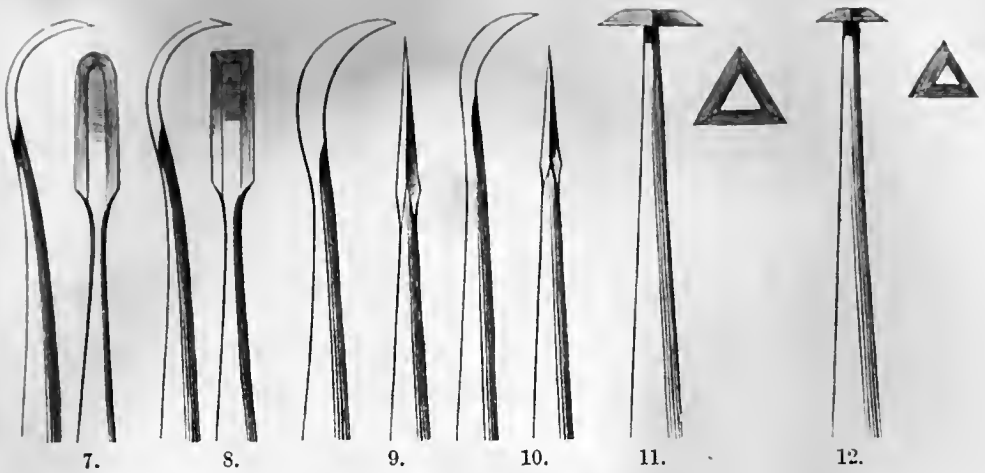


SCALERS AND CHISELS.

One-quarter inch File-cut Handles, turned Shanks, Ball ends—70 forms are given. Any other style of Handles made to order.

Per dozen 6 00

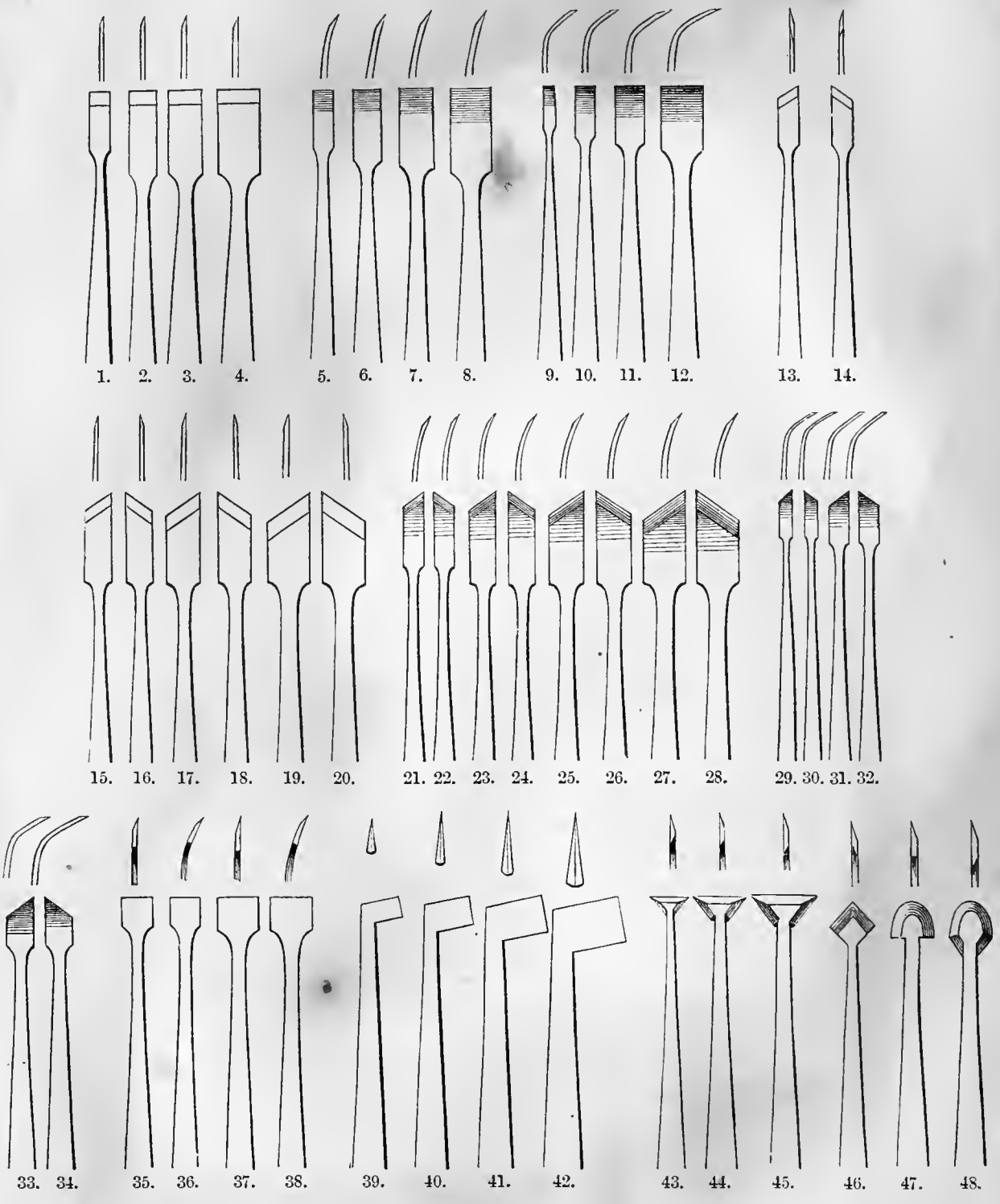




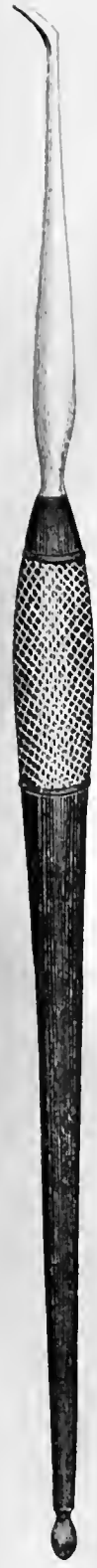
7. 8. 9. 10. 11. 12.

13. 14. 15. 16. 17. 18.

19. 20. 21. 22.



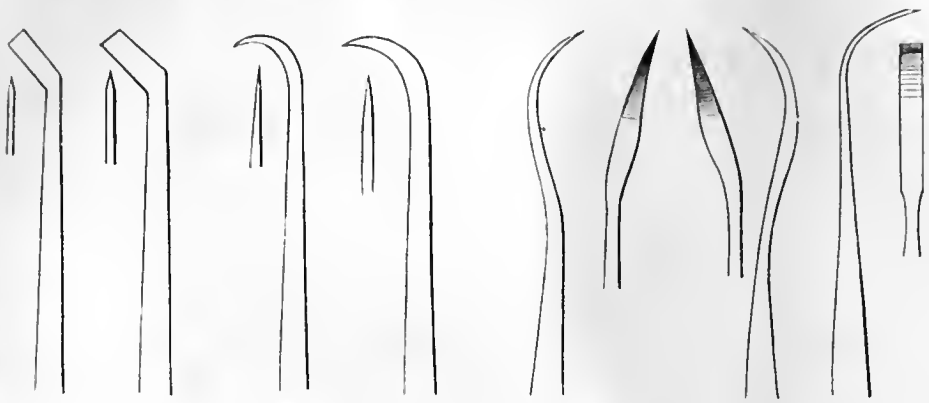
The Cuts of Pluggers, Burnishers, Scalers, and Chisels, represent the various and most approved forms in use. In making out an order, give the number of the Cut and the Page, to insure obtaining what is wanted.



1.

SMALL SCALERS.

Ivory Handles, 8 forms	each	$0 85
Ebony " as per Cut, 8 forms	"	50
The same, with Plain Octagon Steel Handles . . .	"	25



2. 3. 4. 5. 6. 7. 8.

DR. D. H. GOODWILLIE'S

Set of Chisels and Excavators.

(See page 64.)

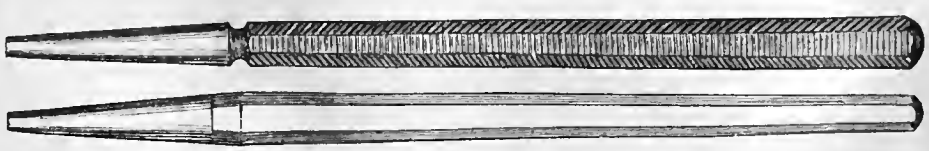
Complete set of Chisels and Excavators, 32 Instruments (7 large and 25 small), Ivory Handles	$32 00.
Same as above, with File-cut Steel Handles	17 00

NOTE.—These Instruments are beautiful in appearance, and of the very best quality.

Also, similarly arranged for traveling Dentists—

25 Bits, best Steel, Ivory Socket Handle	4 50
Same, with Steel Socket Handle	4 00

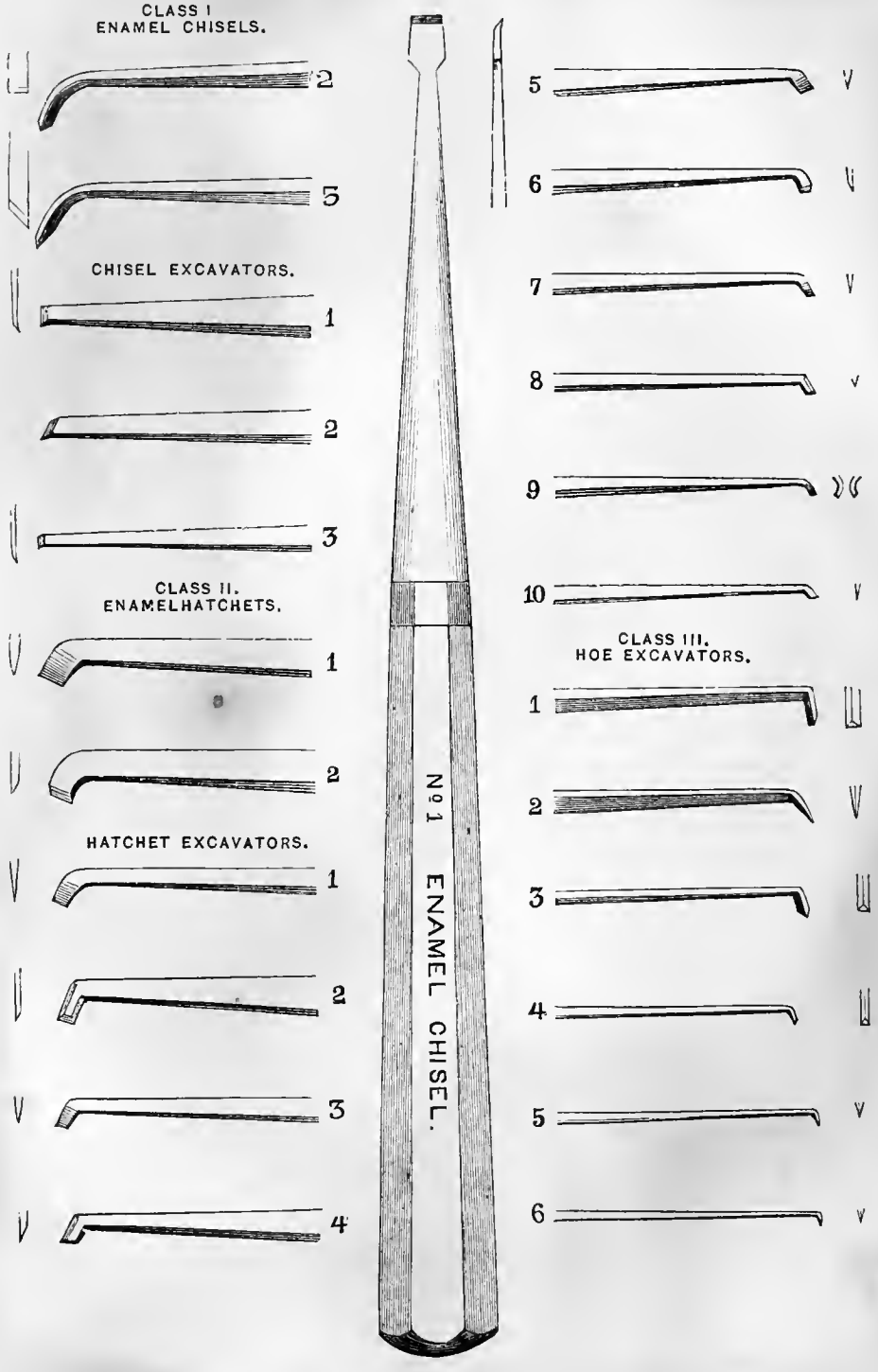
STEEL EXCAVATOR SOCKET.



IVORY EXCAVATOR SOCKET.

SET OF CHISELS AND EXCAVATORS.

Dr. D. H. Goodwillie's Arrangement.

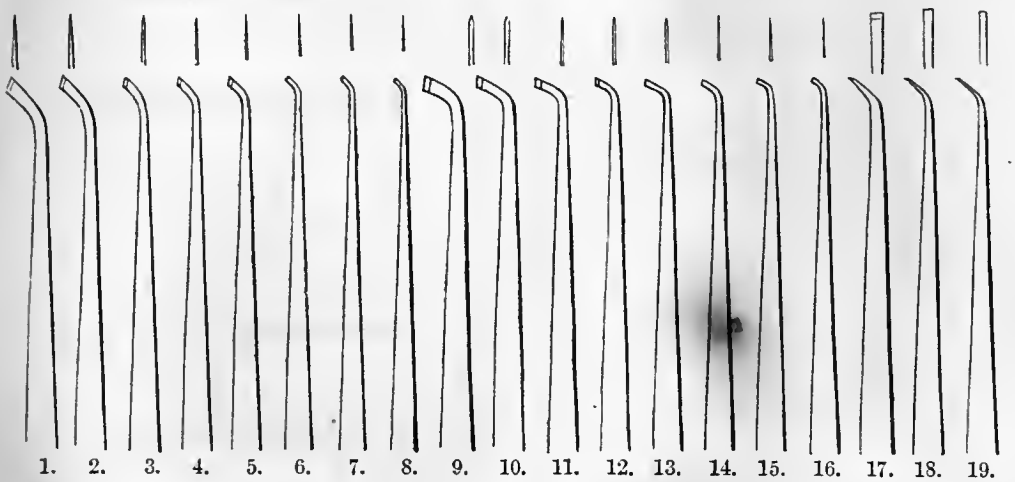


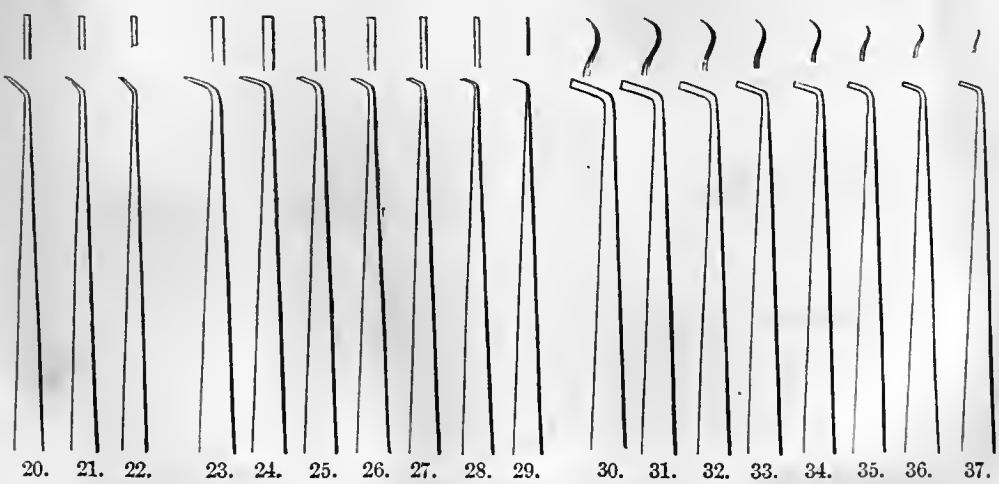
EXCAVATORS, BURS, AND DRILLS.

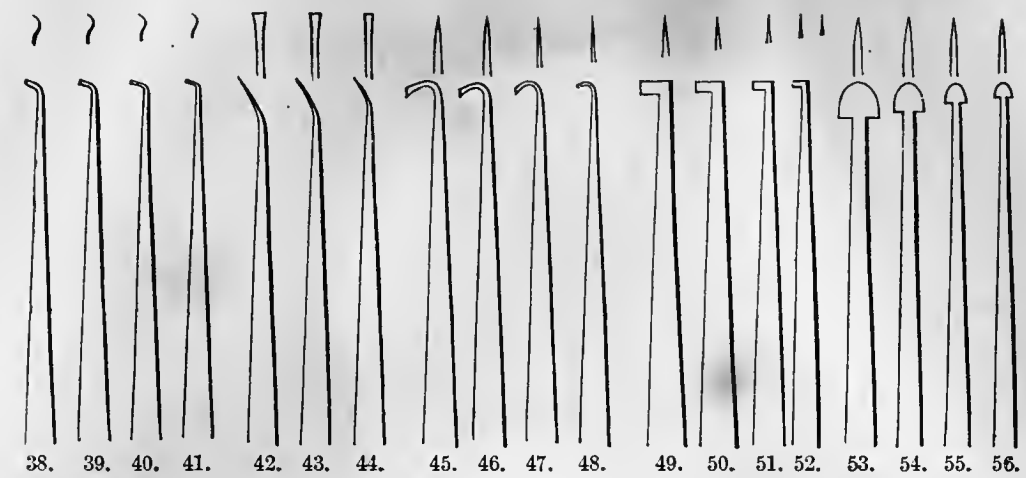
Plain Round Steel Handles	per doz.	$1 25
" Octagon Steel Handles	"	2 00
Octagon Steel Handles, File-cut	"	3 25
Ivory Handles	"	8 00 to 12 00
Pearl "	"	18 00 to 25 00
Cameo "	"	18 00 to 25 00

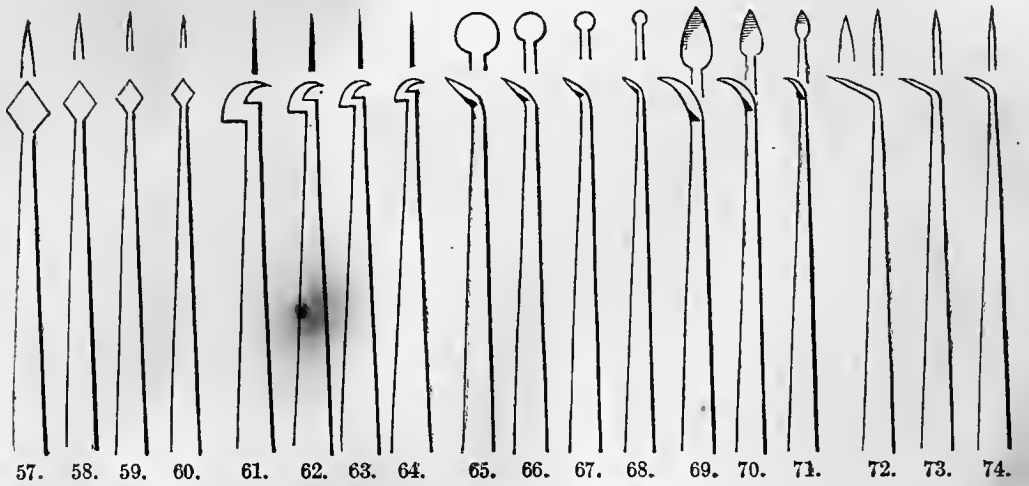
EXCAVATORS.

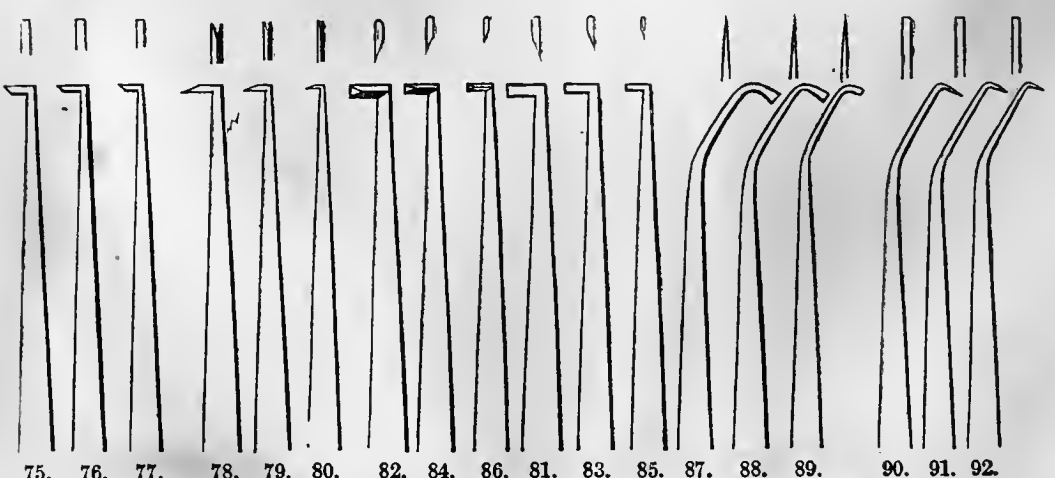
The 134 Points described, are copies of our Plain Octagon Handle Instruments. per doz. 2 00

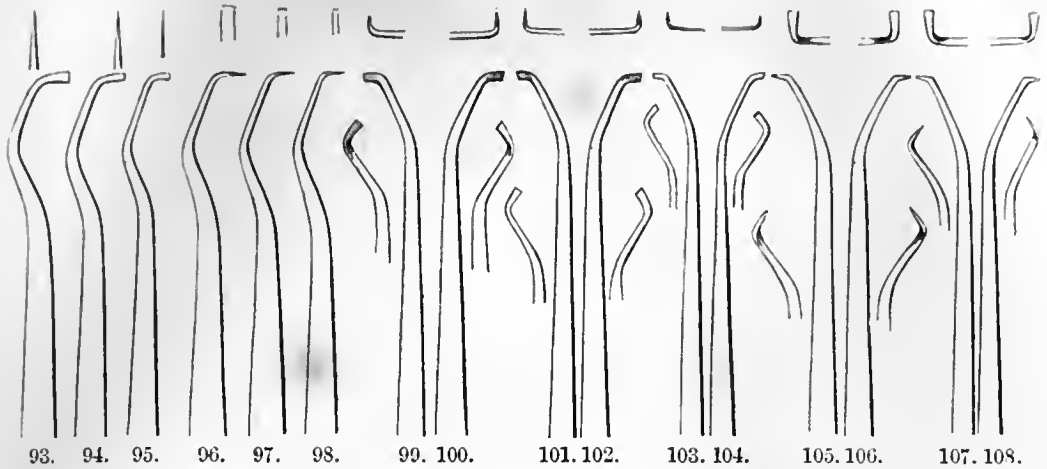


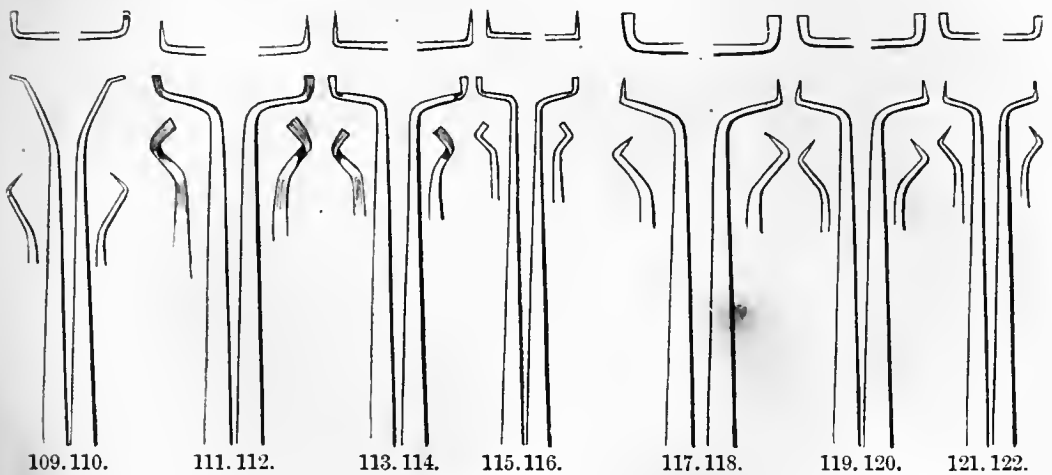


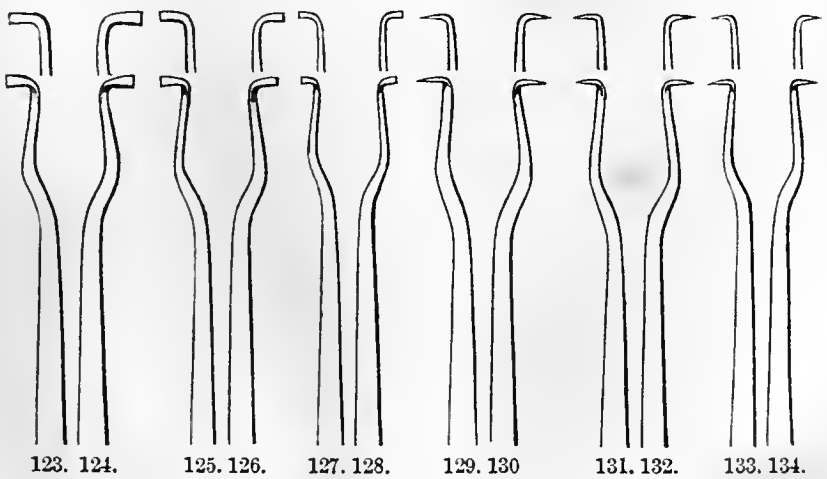

38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56.


57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74.


75. 76. 77. 78. 79. 80. 82. 84. 86. 81. 83. 85. 87. 88. 89. 90. 91. 92.

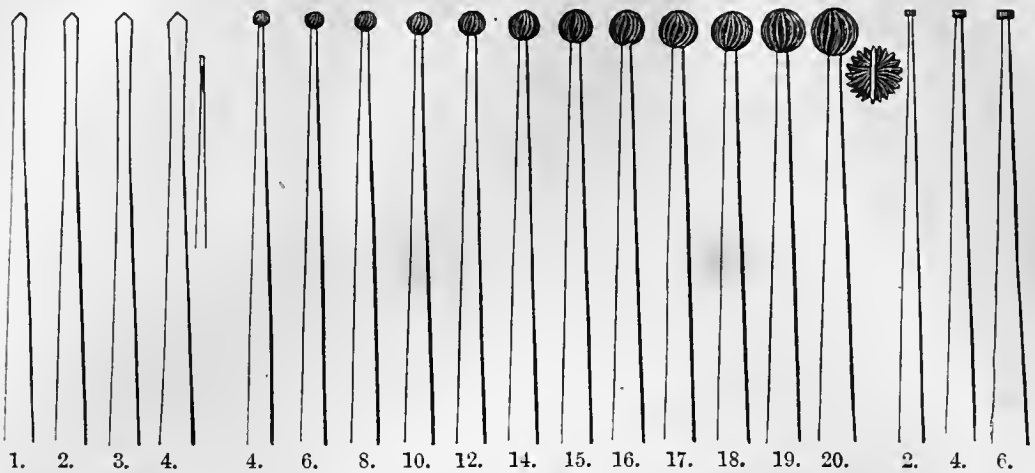

93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108.


109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122.


123. 124. 125. 126. 127. 128. 129. 130 131. 132. 133. 134.

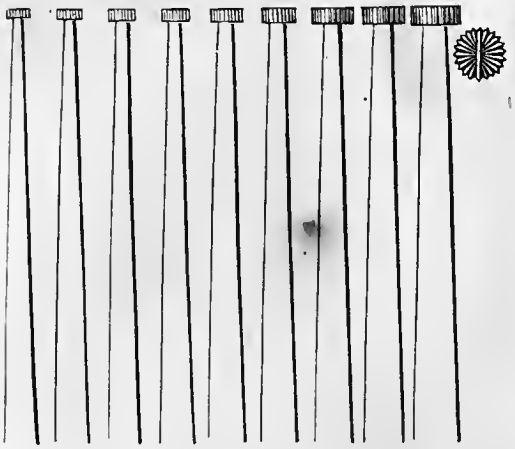
BURS AND DRILLS.

Plain Octagon Handles . . . . . per doz. $2 00

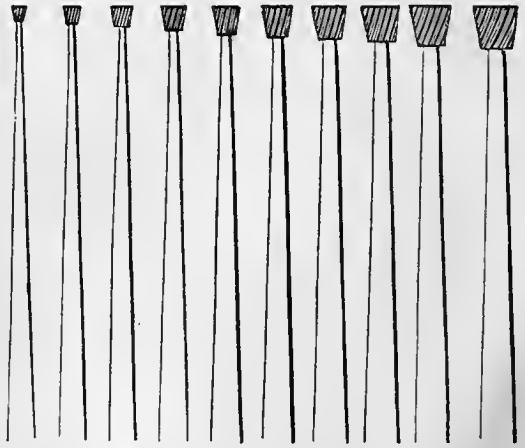


1. 2. 3. 4. — Retaining-point Drills.

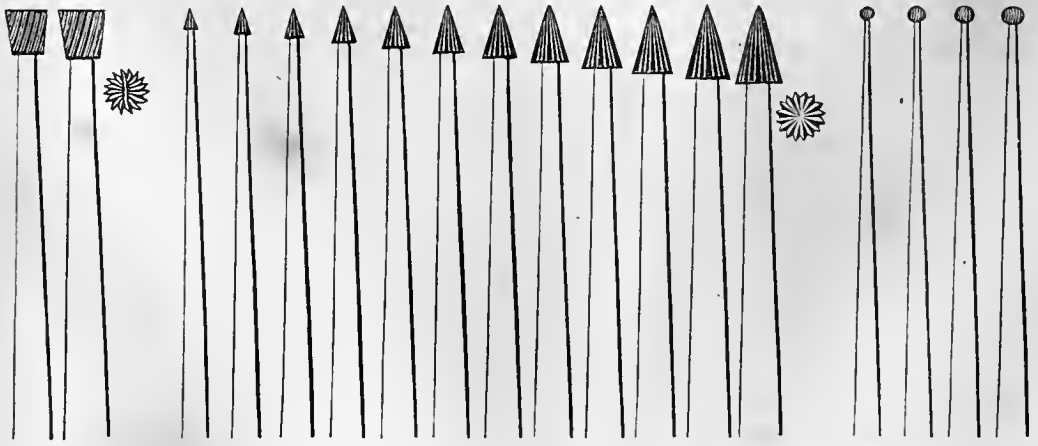
4. 6. 8. 10. 12. 14. 15. 16. 17. 18. 19. 20. 2. 4. 6. — Round Burs.



8. 10. 12. 13. 14. 16. 18. 19. 20. — Wheel Burs.



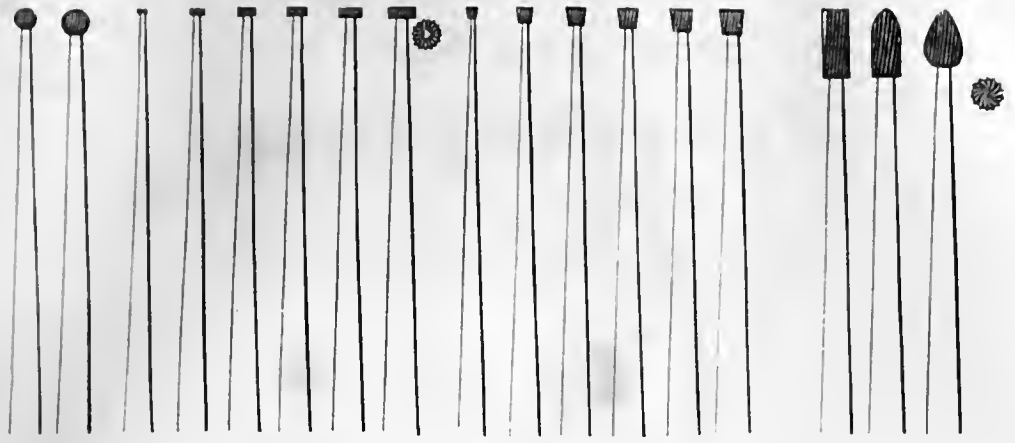
4. 6. 8. 10. 12. 14. 16. 18. 19. 20. — Inverted Cone Burs.



Odd.

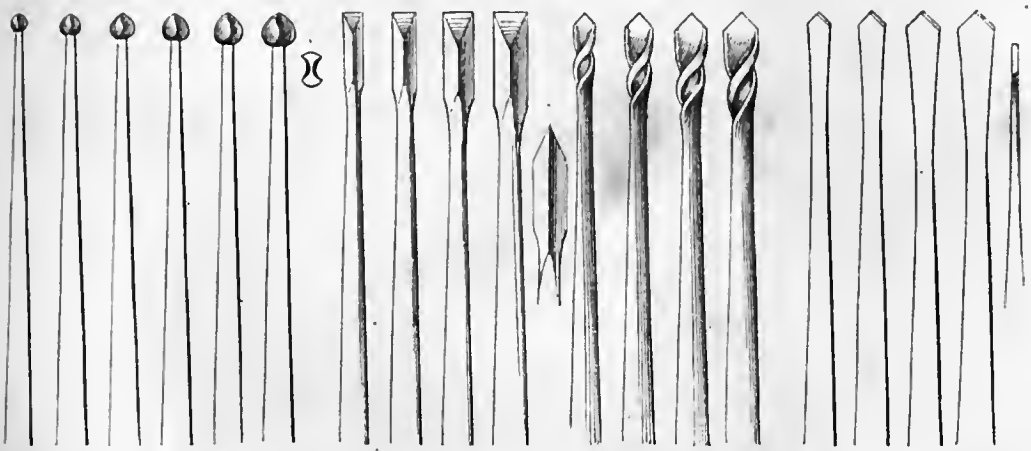
4. 6. 8. 10. 12. 14. 15. 16. 17. 18. 19. 20. — Cone Burs.

3. 4. 6. 7. — Round Fine Cut.



8. 10. 3. 4. 6. 7. 8. 10. 3. 4. 6. 8. 10. 12. Odd.

Wheel, Fine Cut. Inverted Cone, Fine Cut.



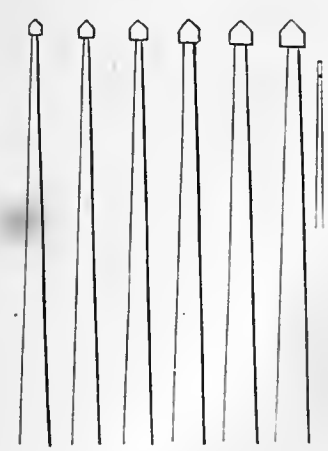
6. 8. 10. 12. 14. 16. Scranton Drills.

6. 8. 12. 14. Square Drills.

8. 10. 12. 14. Auger Drills.

6. 8. 12. 14. Flat Drills.

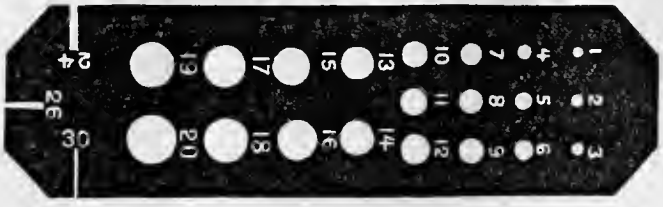
The Cuts of Excavators, Burs, and Drills represent the various and most approved forms of Points in use. In some of the Cuts of Burs, etc., we have not given all the sizes; the smaller ones being difficult to represent on paper, and the differences in grades being so slight that it was not thought necessary to illustrate each size. Enough, however, are given to enable the purchaser to judge of the intermediate sizes. In making out an order, give the number of the Cut and the Page, to insure obtaining what is wanted.



1. 2. 3. 4. 6. 8.

Forbes' Drills.

BUR GAUGE.

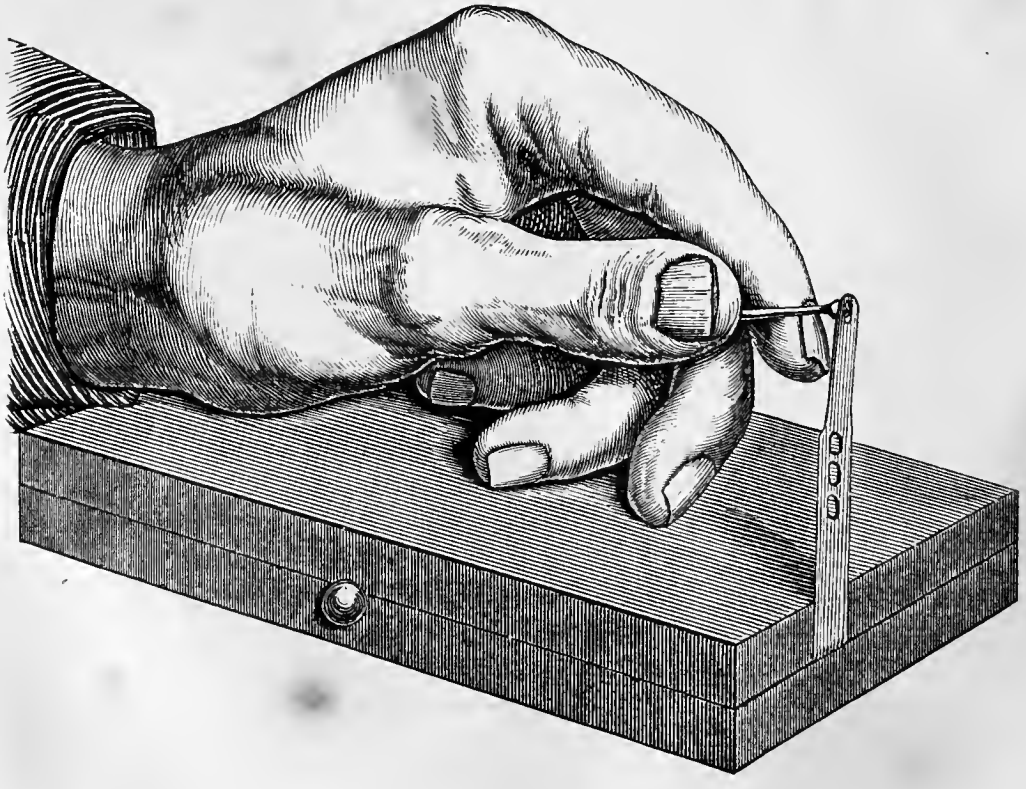


A Dentist having one of these Gauges, can order Burs and Drills of any required size by number.

German Silver $0 50
Steel 1 25

GATES' NERVE AND BUR DRILL.

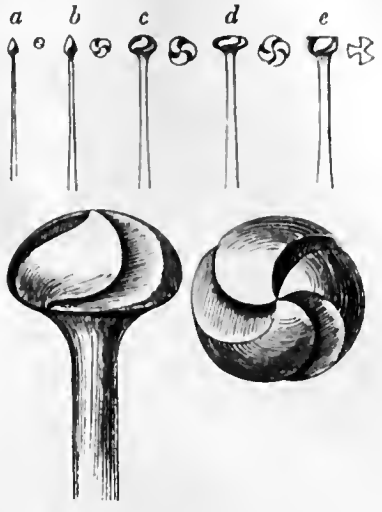
(PATENTED OCTOBER, 1866.)



The Cut represents the position for sharpening, the hand resting upon a Case especially designed to contain an entire Set of these Instruments, with the Rack and Knife-edge Slip for sharpening.

The invention of this Drill marks a new era in fang filling, while it also furnishes an improved Bur. Its superiority will be evident to every observer. It

combines the essential properties of a Pulp-canal Reamer, Drill, Bur, and Compound Excavator. It clears itself in operating, cuts instead of scraping, and can be sharpened with a stone until consumed. When used in the flat pulp canals, its round form shields it from breaking, its Guide-point confines it to the canal in ordinary deviations from a straight course, and (of paramount importance), by its perfect manner of clearing itself, it avoids the pneumatic effect of other forms for cleansing, which, piston-like, injure by exhaustion or *by forcing the deteriorated fluids and air through the foramen*, thereby creating or aggravating disease in the periosteum. By enlarging the canal it also prevents like effects from the subsequent process of filling. Differing essentially from any in use, this Bur Drill is as efficient in starting and penetrating through solid material as when employed to enlarge cavities.



The Set consists of five varieties, of which

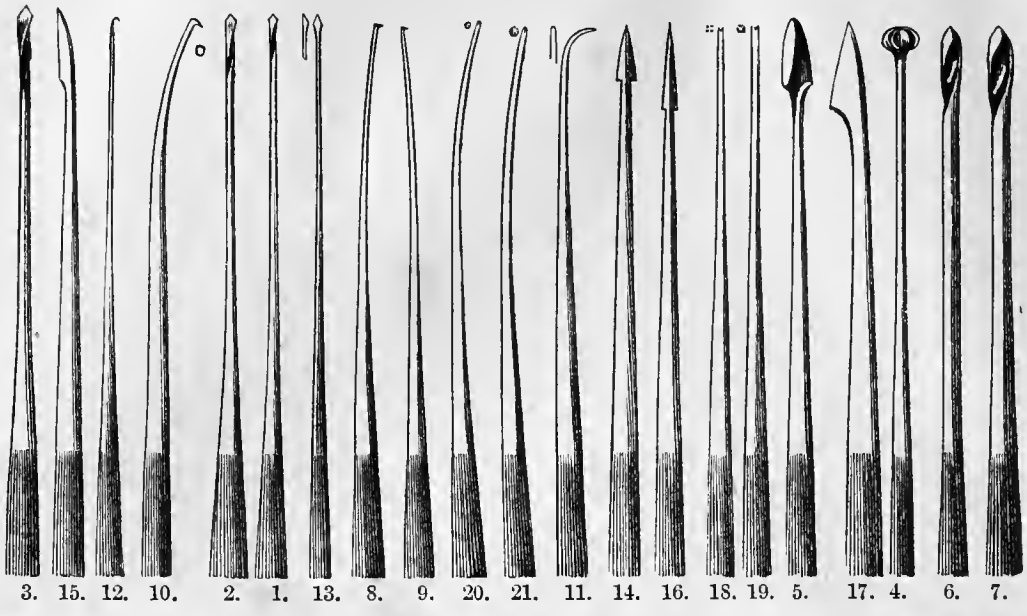
"*a*" represents the Pulp-canal Reamer, with flexible stem,	3 sizes.	
"*b*" " " " " " inflexible "	3 "	
"*c*" " " Round Bur Drill	12 "	
"*d*" " " Excavator "	12 "	
"*e*" " " Undercutting Bur Drill . . .	12 "	
Nerve Instruments *a*, *b*	per doz.	$3 00
Bur Drills *c*, *d*, *e*	"	2 50
Case of Turkey Morocco		4 00

NERVE CAVITY INSTRUMENTS.

For Extracting Nerves, Excavating and Filling Nerve Cavities.

Dr. Palmer's Instruments in Set of 15	per set	$4 00
" " " 15 in Morocco Case . .	"	4 60
" " " 21	"	5 50
" " " 21 in Morocco Case . .	"	6 50
Dr. Hunter's Nerve Canal Pluggers in Set of 12 . . .	"	3 00
Dr. Arrington's Nerve Extractors and Fang Fillers, drawn and spring temper, in Set of 24	per set	5 00
Nerve Extractors, Barbed, for Socket.	per doz.	0 75
" Cavity Pluggers "	"	0 75
" Extractors, Square Steel Handles	"	2 00
Probes, for examinations, Round Handles	"	1 25

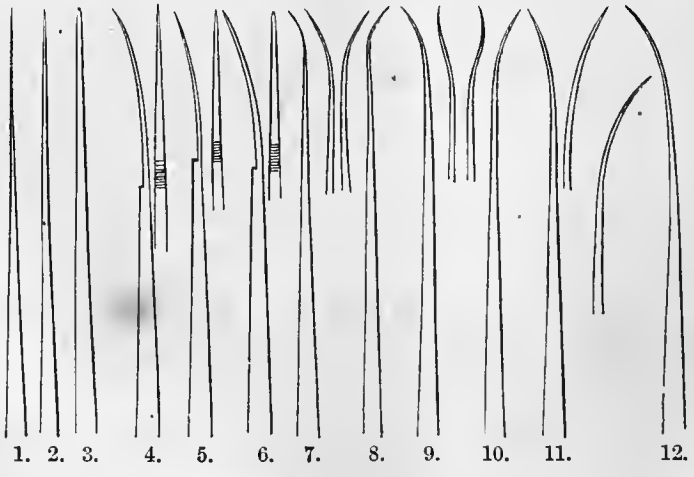
DR. CORYDON PALMER'S NERVE INSTRUMENTS.



The Set consists of 21 Instruments, made of the best quality of steel, finished and tempered in the best manner. We also manufacture Sets of 15 Instruments. Patterns furnished by Dr. Palmer.

Per Set of 15	$4 00
" " of 21	5 50

DR. HUNTER'S NERVE CANAL PLUGGERS.



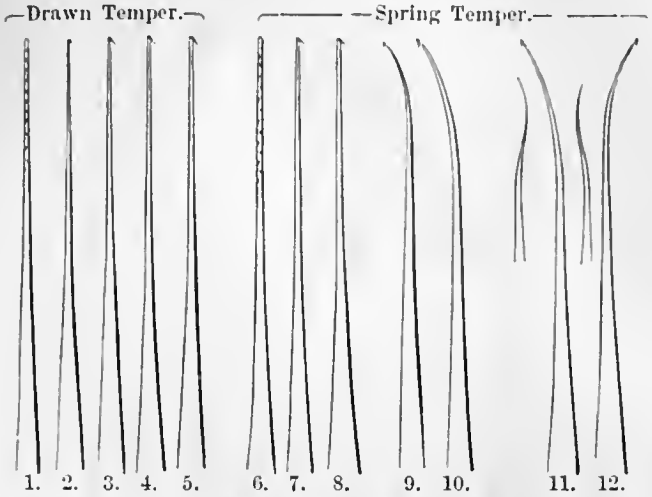
The Set consists of 12 Instruments, carefully made, and tempered in the best manner.

Per Set	3 00

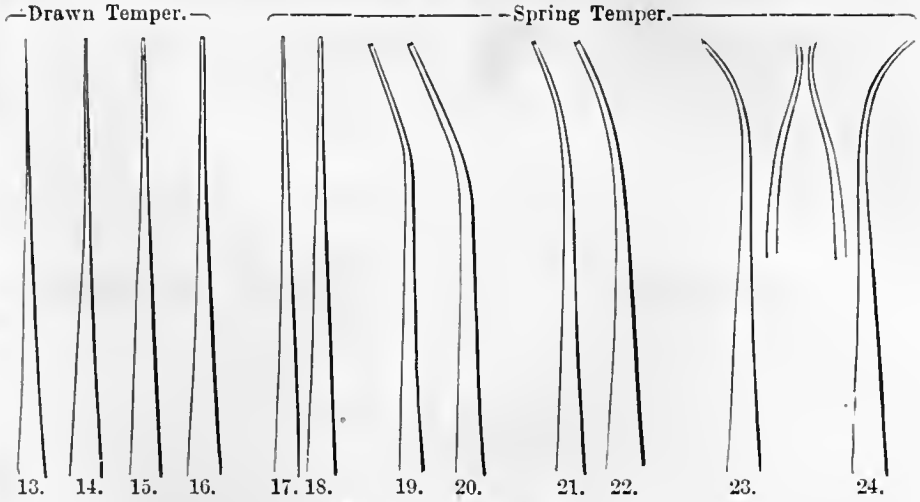
NERVE EXTRACTOR AND HOLDER.

DR. ARRINGTON'S NERVE EXTRACTORS AND FANG FILLERS.

Drawn and Spring Temper.



Nerve Extractors.



Nerve Cavity Pluggers.

The Set consists of 24 Instruments, best quality of steel, made and finished in the best manner.

Per Set of 24 . . . . . $5 00

BARBED NERVE EXTRACTORS.

In Packages of One Dozen, Assorted Sizes, Soft and Half Soft.

ALSO,

SOCKET HANDLE WITH RING SLIDE.

ADAPTED TO THE EXTRACTORS.

"They are very delicate, and more perfectly barbed than any we have seen. They catch readily and hold tenaciously anything in the shape of tooth pulp that may be brought in contact with them. They constitute a beautiful example of the progress that has been made, in comparatively a short time, in the manufacture of fine, delicate instruments for dental purposes."—*Dental Register*, Sept., 1866.

Per package of one dozen $0 75

Holders 1 00

FILES.

MURPHY'S—Philadelphia Manufacture.

Separating	10 cts. each;	per doz.	$1 00
Finishing, Bevel Edge	18 "	"	2 00
" Flat Oval, Blunt and Pointed	18 "	"	2 00
Molar, Single Curve	18 "	"	2 00
" Double Curve	22 "	"	2 40
" " Feather Edge	30 "	"	3 25
" " Extra thick	30 "	"	3 25
Oval Stump	18 "	"	2 00
Half-Round Stump	18 "	"	2 00
Finishing, for Lateral Cavities, Double-end	22 "	"	2 40
" for Crown " "	22 "	"	2 40
Bicuspid (thick and thin)	18 "	"	2 00

STUBS'—Our own Importation.

(See Plate Files.)

Separating, various cuts	per doz.	2 50

ROMMETIN'S (Successor to FROID).

Our own Importation.

(See Plate Files.)

Separating, One Safe Side, Nos. 1 to 8.	per doz.	1 40
" Cut Four Sides, Nos. 6, 7, and 8	"	1 40
" Curved, Cut Inside, Nos. 3 to 6	"	1 40
" " Cut Outside, Nos. 3 to 6	"	1 40
Plug Finishing, Pointed, Nos. 0, 1, 2, and 3	each	16
" " Blunt, Nos. 0, 1, 2, and 3	"	16
" " Pointed, Curved, Nos. 0, 1, and 2	"	16
" " Blunt, " Nos. 0, 1, and 2	"	16
Stump, Half Round, Pointed, Nos. 1 to 5	"	22
" " Blunt, Nos. 1 to 4	"	22
" Oval, Blunt, Nos. 0, 1, and 2	"	22
" " Pointed, Nos. 0, 1, and 2	"	22
Knife-Edge or Bicuspid, Pointed, Nos. 3, 4, 5, and 6	"	22
" " Blunt, Nos. 1, 2, 3, and 4	"	22

DR. FORBES' FILE CARRIER.

The Cut is exactly half the size of the Instrument. Designed for Files for finishing fillings. The Files are three inches in length, and from one-eighth to three-sixteenths of an inch in width, and of various thicknesses and cuts. The Shaft extends through the Handle, and can be adjusted at any point by a Thumb-screw at the end. Files of different lengths can be used and held firmly.

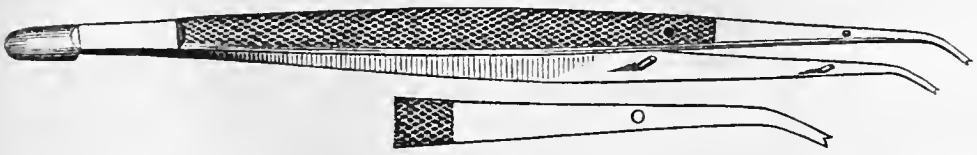
Carriers		$3 00
Files, assorted	per doz.	1 50

FILE CARRIER FOR SEPARATING.

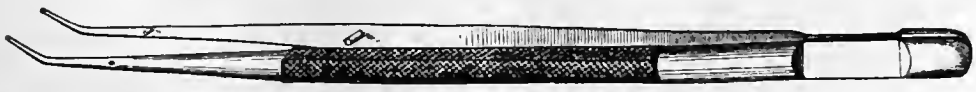
Ebony or Bleached-bone Handle	2 50
Ivory	3 00

FOIL CARRIER AND PLUGGER COMBINED.

No. 1.



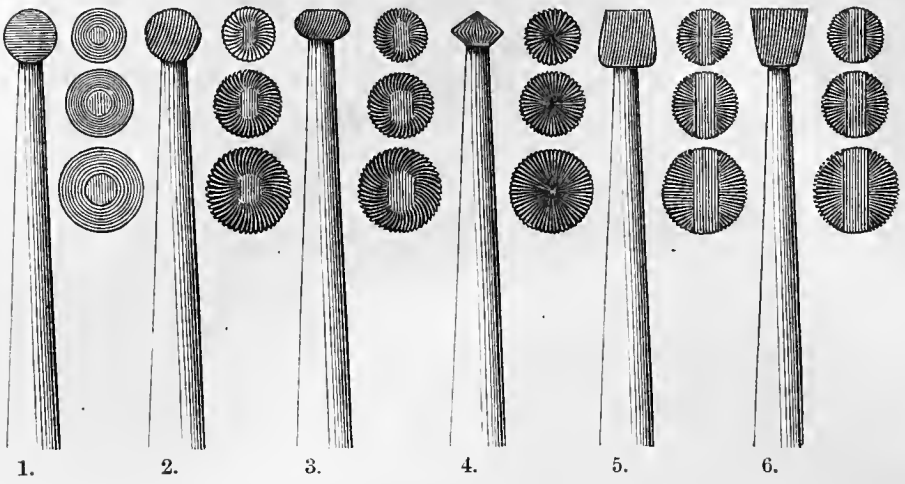
No. 2.



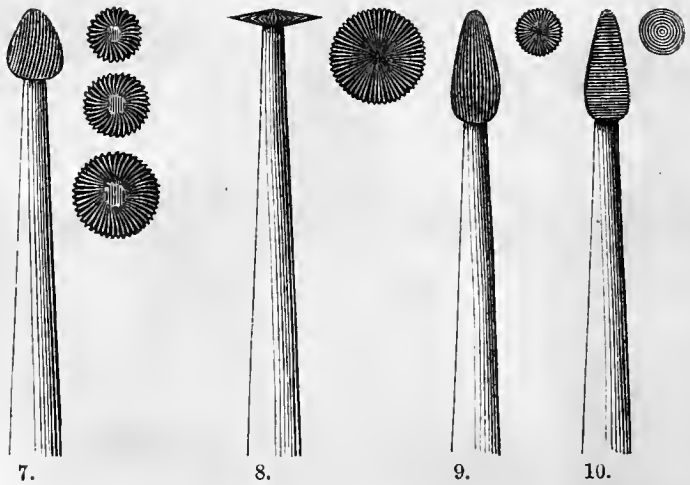
The superiority of this Instrument over the ordinary Foil Tweezers, consists in the additional strength, the Serrated Points, and the large, rounded end of the Handle, which permits the use of it, when desired, as a Plugger to fix the gold in the proper position.

No. 1, Flat Handle	2 00
No. 2, Octagon Handle	1 75

PLUG FINISHING BURS.



1. 2. 3. 4. 5. 6.



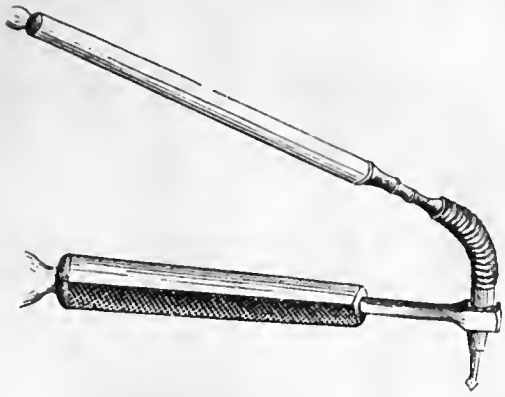
7. 8. 9. 10.

These Burs are made of first quality steel, extra fine cut, and finished in the best manner. Numbered from 1 to 7, each number being made of three sizes—three-sixteenths, four-sixteenths, and five-sixteenths of an inch in diameter. Numbers 8, 9, and 10 are of one size only.

Each $0 70

MERRY'S DRILL.

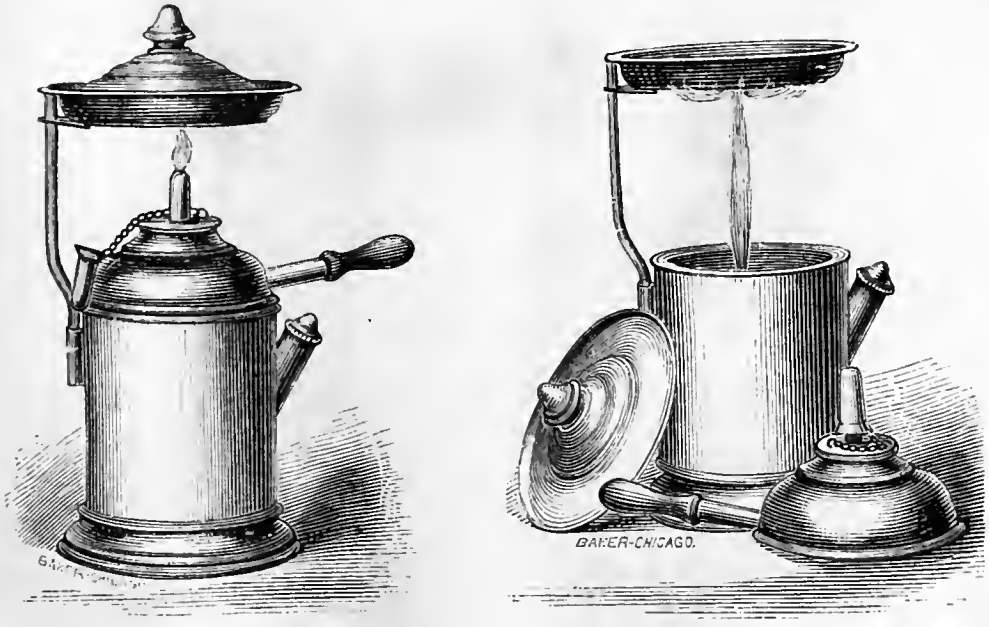
Ivory Handle.



This Drill can be applied at any angle desired.
Two dozen Bits accompany it. Complete $4 50

METCALF'S ANNEALING LAMP.

(IMPROVED.)

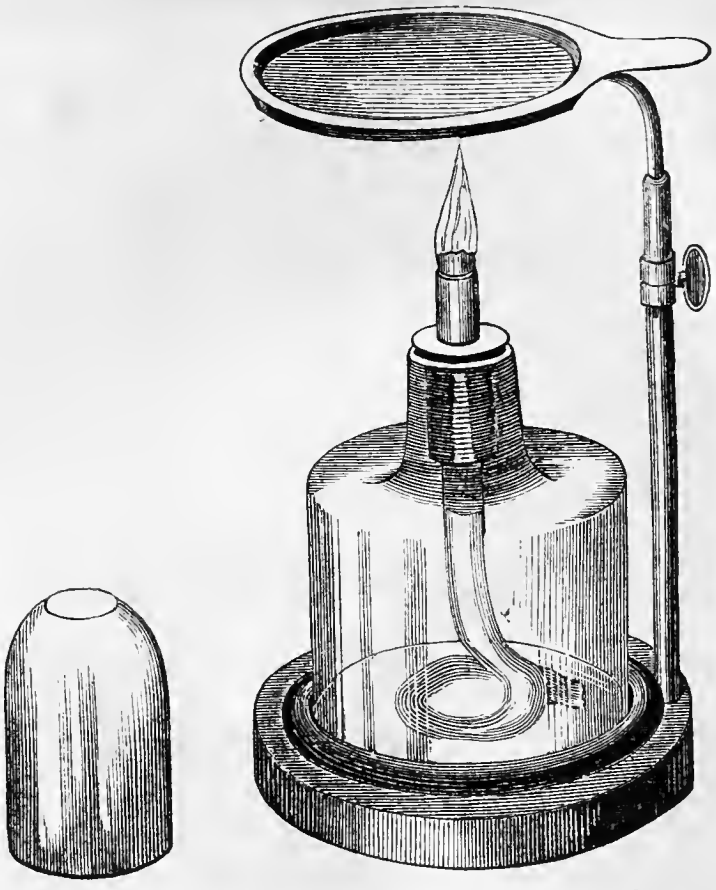


The Cut represents about one-third the size of the Lamp. Tray of Mica.

Silver Plated. Complete $14 00
Brass. " 10 00

GOLD FOIL ANNEALING LAMP.

Our own Design.



The Cut represents the Lamp half size. Base of Ebony, and Annealing Tray of German Silver.

Complete $2 50

Some of the advantages claimed for the "Annealing Lamp," are: by its use all soft Gold Foils are made as adhesive as the best Adhesive Foils.

Any amount of heat sufficient to make the Foil adhesive can be produced without fear of melting the edges.

It does not make the Foil hard and unyielding, as is often the case when passed through a flame, but leaves it soft as before annealing.

It keeps the Foil warm during the operation, thereby preserving its adhesive quality in the most perfect condition.

The adhesive quality is imparted to the Foil *after it is prepared for the cavity*, obviating the annoyance often experienced, especially in warm weather, in having its adhesiveness partially destroyed by the moisture of the fingers.

CREASOTE APPLIANCE.

Intended to prevent fluid caustics, such as Creasote, or Solution of Nitrate of Silver, from running down and cauterizing the lips when being applied to the gums. The Cut shows the size of the Instrument. A Spiral Platina Wire, two inches long, is inserted in a Handle, passing through a small piece of Sponge, over which is a Glass Tube one and a quarter inches long. The Tube slides over a part of the Handle to keep it firm, and to hold the Wire in the centre. When the caustic is taken up on a small piece of cotton, if any should run down, it is caught in the Tube. . . $0 75

SYRINGES.

Gold, extra heavy, 18 carats fine, two Pipes	30 00
Silver, two Pipes	7 50
Coin Silver, small size, Electro-gilded, with two Pipes, a beautiful article .	7 50
Silver Plated, two Pipes	4 00
Glass, Silver Mounted, beautiful and cleanly	4 50
Britannia, Silver Pipe	1 00
" German Silver Pipe	0 63
Vulcanized Rubber	1 00
" " Silver Pipe	1 50
" " 18 carat Gold Pipe	3 50
* " " Small, Gold Pipe, for injecting Iodines and Acids into Abscesses	7 00
* Vulcanized Rubber, small, with Steel Pipe, Subcutaneous . . .	4 00
Glass, small, with Steel Pipe, Subcutaneous	5 00

* Inclosed in neat Morocco Cases, convenient for the Pocket, and protecting the Syringe.

ELECTRO-PLATED ELASTIC BULB SYRINGE.

Entire length, 6 inches; diameter of Bulb, 1½ inches.

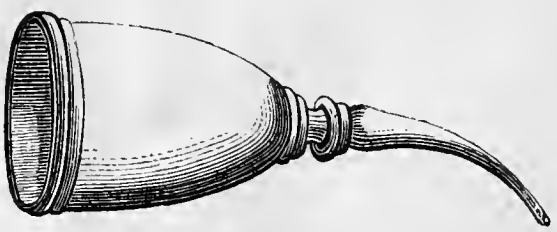
DIRECTIONS.—Compress the Bulb, insert the point under water; it fills itself, and is ready for use $2 50

SAW FRAMES.

Ivory Handles.

These are neat and convenient Instruments for cutting off Natural Teeth for pivoting, or for sawing off the linings of Artificial Teeth to remove them from the plate $3 50

TAFT'S EXTENSION THIMBLE.

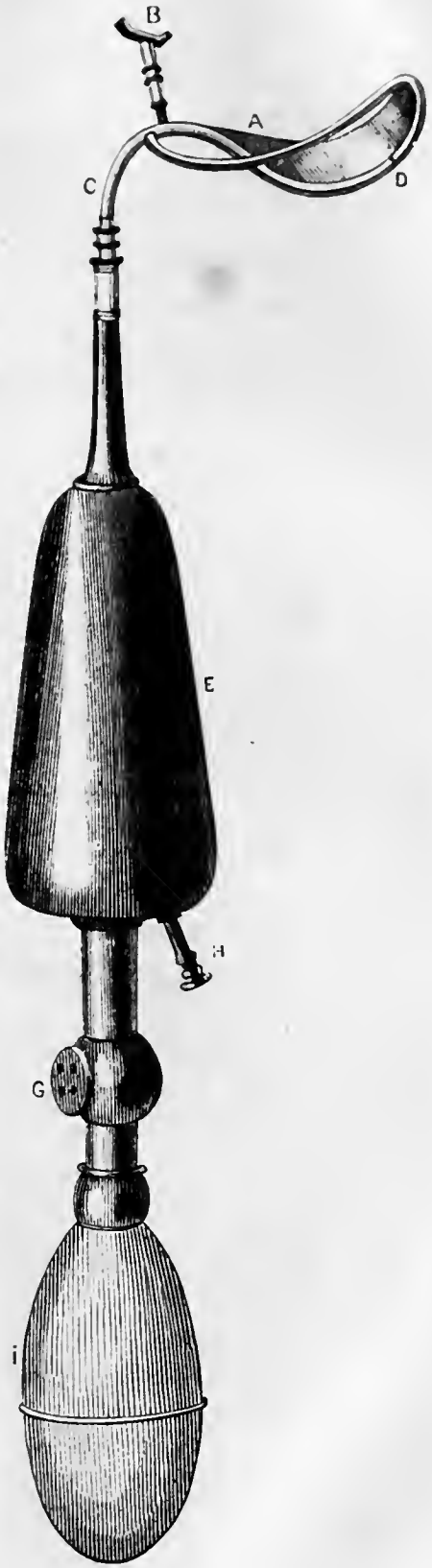


The accompanying Cut represents an Extension, to be used upon the index or middle finger of the left hand. It is employed to aid in holding the napkin, paper, spunk, or whatever may be used to prevent the encroachment of saliva. The point of this Instrument can extend into the mouth where the finger, either on account of its size, or for want of length, cannot go. It may also be used occasionally to hold down a piece of gold until it is made fast in the proper position. In filling the teeth of the left side, both above and below, it is decidedly advantageous. It will reach over and draw the napkin up firmly against the lingual sides of the teeth. There are four sizes, corresponding with numbers 7, 8, 9, and 10 of sewing thimbles.

Silver 3 00
Black Vulcanite 40

SALIVA PUMPS.

(See page 82.)



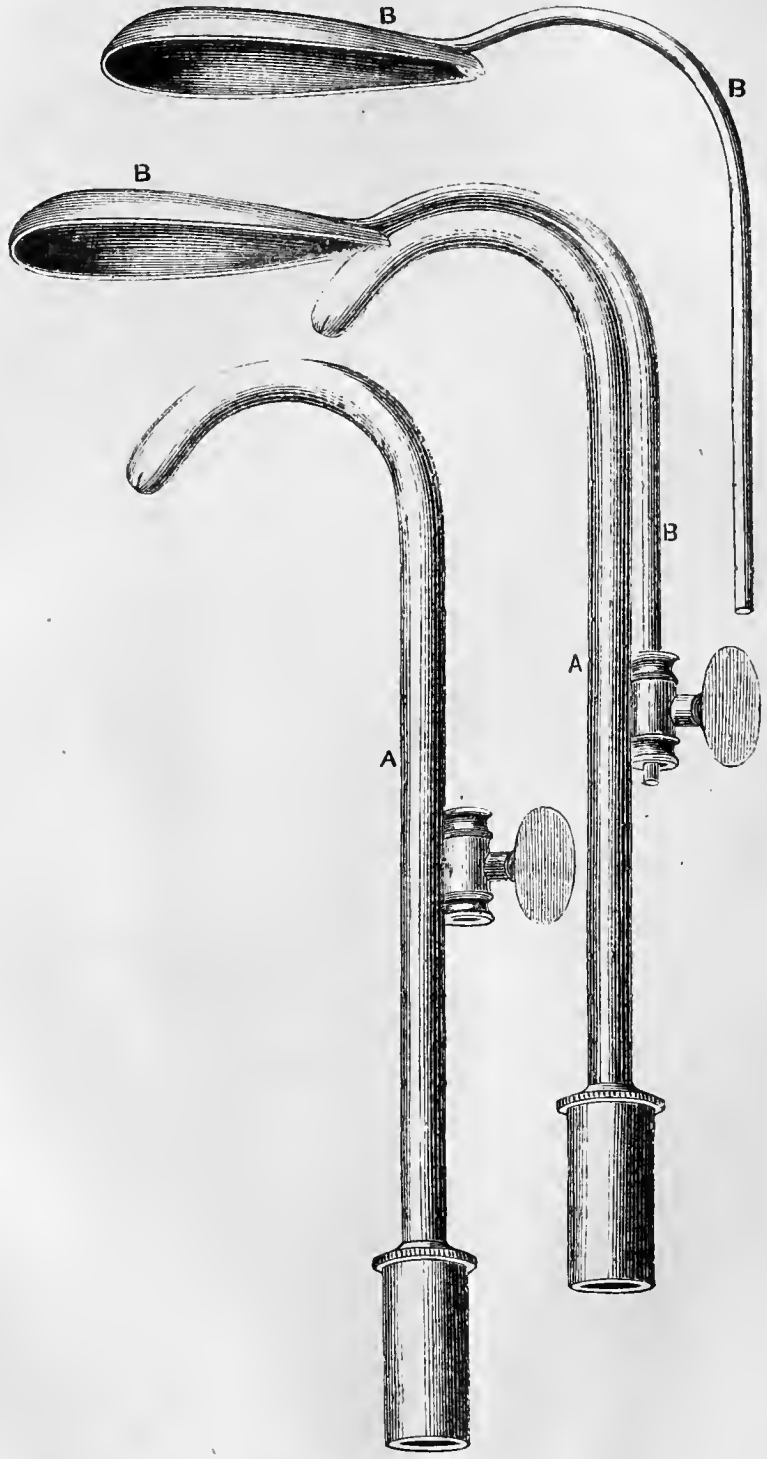
The annexed Cut represents Dr. Dibble's Saliva Pump and Tongue Holder combined. The object of this Instrument is to facilitate the operation of filling teeth of the lower jaw by keeping the mouth free from saliva, and as a means of holding the tongue away from the teeth; also a means of supporting the upper jaw, and so assisting the muscles which keep the mouth open, the application of which will be readily understood from the illustration. The Instrument is composed of Coin Silver heavily plated with gold, and Hard Rubber. A designates the Plate which keeps the tongue away from the teeth; B, the Arm which supports the jaw; C, the Silver Tube and Base which fit over the jaw; D, the opening where the saliva enters the Tube; E, the Chamber that receives the saliva. A vacuum is made in the Saliva Chamber by the pressure of the Bulb I, thereby causing the saliva to flow into the opening D; H, the opening where the saliva is discharged; G, the Exhaust Valve. There are two Mouth Pieces, one for the right side, and one for the left side of the mouth.

The Instrument is readily cleaned externally by means of a brush, soap, and water; internally, by drawing soap and water through it. It must not be laid down on its side after using until emptied of saliva. The entire length of the Instrument is fifteen inches.

Complete	$16 00
Pump only	8 00

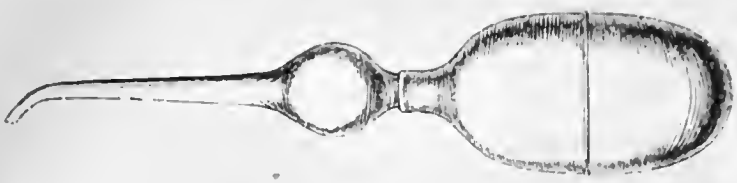
DR. ARRINGTON'S ATTACHMENT TO DR. DIBBLE'S SALIVA PUMP.

(See page 81.)



Cuts, exact size of the Instrument. "A," Saliva Tube; "B," Tongue Holder.

German Silver, Electro-gilded	$7 00
" " Silver Plated	5 00
" " Plain	4 00
Pump, additional	8 00

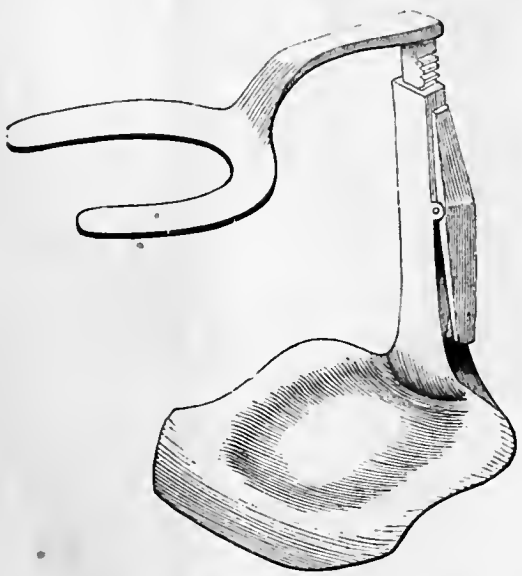


Glass Tube, Elastic Bulb, Saliva Pump	1 00
Extra Glass Tube	50

TONGUE COMPRESSORS.

Made of Coin Silver.

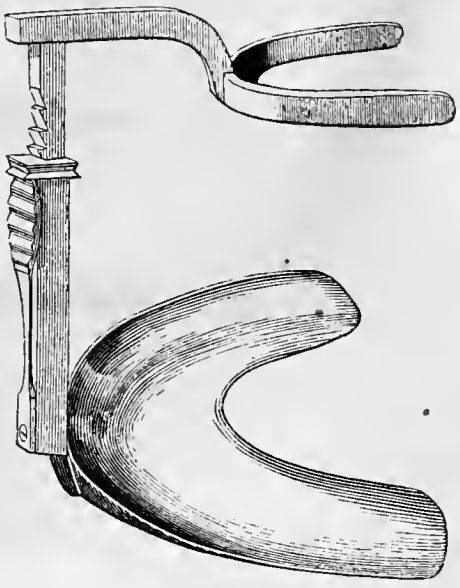
No. 1.



For the original idea of this simple, but very useful Instrument, we are indebted to Dr. Geo. E. Hawes, of New York City.

With this Instrument the tongue may be clamped down in place and kept in position as long as desired. The sublingual and submaxillary ducts may be very effectually closed by placing upon them rolls or pads of bibulous or tissue paper before applying the Compress; a pad of paper or cloth should also be placed on the tongue before applying the Instrument. In filling the inferior molars and bicuspids, it will be found a useful Instrument 11 00

No. 2.



This Cut represents a modification of the Compressor by Dr. Wm. N. Morrison, of St. Louis, and is preferred by many to No. 1 . . . . $11 00

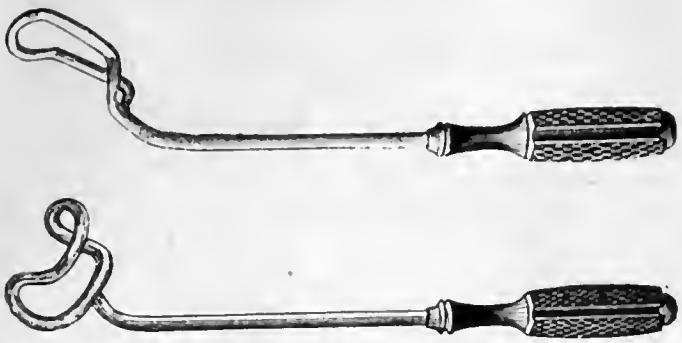
DR. FLAGG'S TONGUE HOLDER.

It will be found that the use of this Instrument will insure additional facility to the Operator, and maintain the tongue in position with perfect comfort to the patient, producing no fatigue, no unpleasant sensations, and even removing all desire to resist constraint.

DIRECTIONS FOR USE.

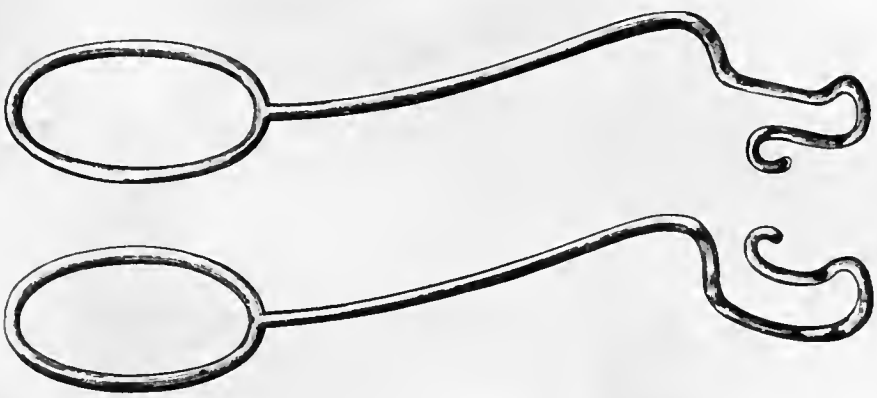
After introducing a fold of napkin, or a small piece of muslin, under the tongue, and then covering that organ by back-folding the napkin, or placing another small piece of muslin upon it, the Holder should be put in position nearest to the side where it is proposed to operate, and the patient be requested to retain it thus by means of the *right* hand if the cavity be on the *left* side, and the *left* hand if the cavity be on the *right* side, the elbow resting upon the arm of the operating chair . . $2 00

NAPKIN HOLDERS.



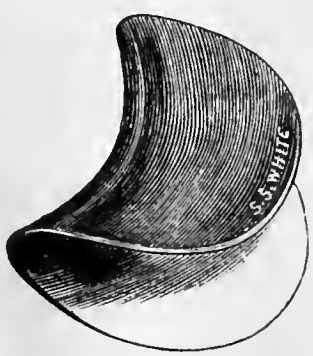
Ebony Handle, Silver Plated Wire . . . . . each $2 00

NEW FORM OF NAPKIN HOLDER.



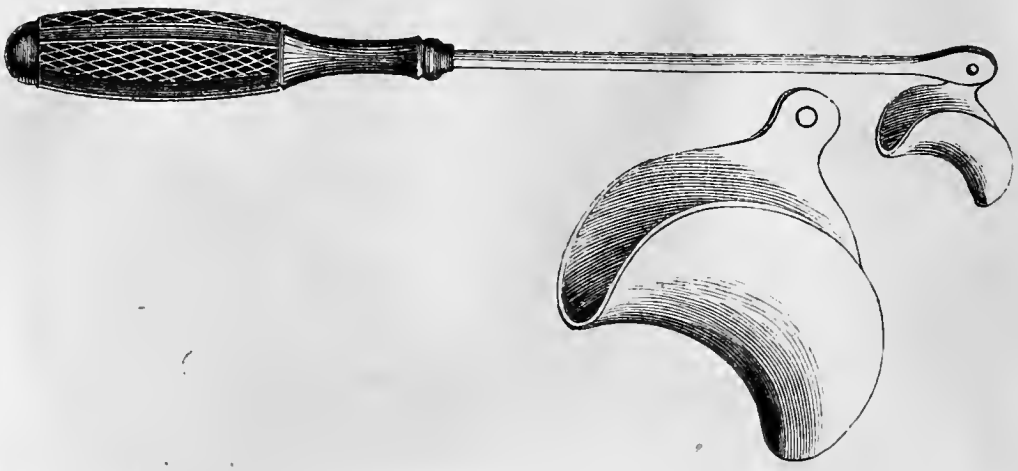
Presented to the Dental Convention by Dr. Corydon Palmer. (See report in November, 1865, number of the DENTAL COSMOS.) Manufactured by request of the Convention.

Per pair, of Coin Silver 8 00



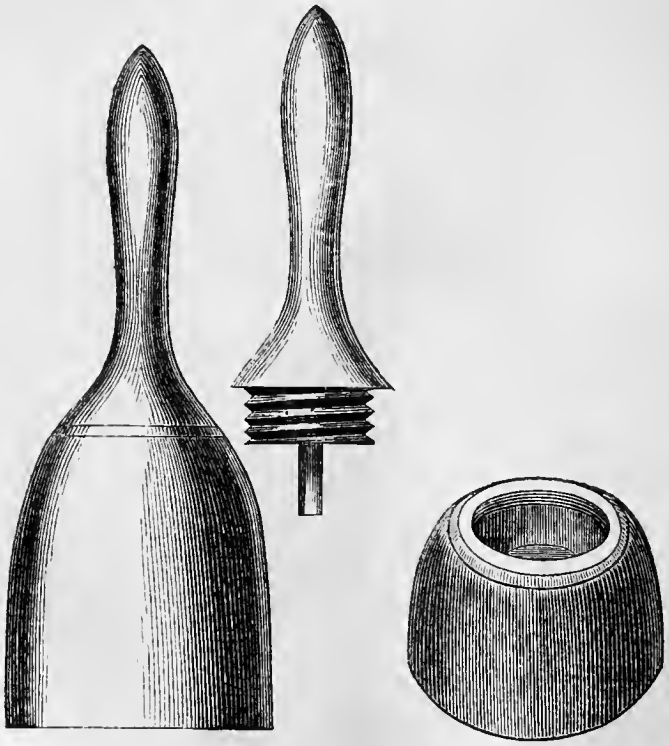
Silver Plated Saddle or Lip Protector 75

The advantage of this Instrument was suggested by the use of the ordinary Cheek Holder. It is found very useful in protecting the lips from being chafed, when using either Files, Drills, or Excavators.



Ebony Handle, Silver Plated Cheek Holder $2 00

MERCURY HOLDER.



For convenience in preparing Amalgam. The Cut represents the size of the Holder, which will contain one-eighth pound of Mercury. A small opening through the Tube allows the Mercury to escape in a very fine stream, which can be regulated at pleasure by means of a plug in the lower end of the Tube, or its escape prevented when not in use.

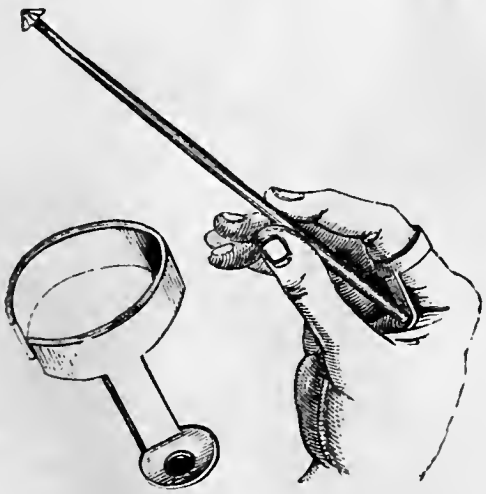
Holder, of wood, nicely polished 25
" Filled with Re-distilled Mercury 50

FOIL CRIMPERS.

Made of thick Tin; four inches wide and five inches long; japanned on the back and face, as shown in the Cut. Two of these are used; a half sheet of Foil being laid upon one, the other is placed over it with the Flange upon the extreme edge of the Foil and drawn to the other Flange.

Per pair $0 50

BUR THIMBLES.

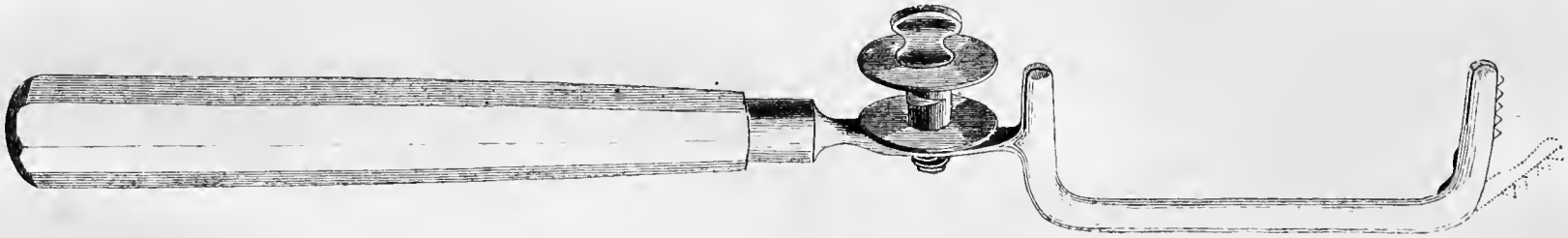


This consists of an open Ring for the middle or the index finger, with a Socket attached, in which rests the end of the handle of the Drill. It not only saves the hand, but the Instrument is rotated much more easily . 50

Also, the same article made of German Silver, with the Thimble hinged on to the Ring 50

No. 1—Trephine for the Antrum $2 00

No. 2—Amalgam Manipulator $1 75



No. 3—Ivory Handle Tape Carrier $3 50

No. 4—Universal Porte Polisher $1 00

TREPHINE FOR THE ANTRUM.

Cut No. 1.

This Instrument, made as a Trephine, will be found useful when it is desired to enter the Antrum through a tooth socket. There are two sizes, the larger being correctly represented in the Cut; the smaller one is contained in the Handle—which is hollow—and may be adjusted to the same Socket by the Screw represented in the Cut $2 00

AMALGAM MANIPULATOR.

Cut No. 2.

A convenient Instrument, recommended by English operators, designed to facilitate the preparation of Amalgam for fillings, having a Cup at one end for taking up the desired amount of filings or powder, and a curved Spatula at the other end for combining the Mercury with the filings and packing it in the cavity 1 75

IVORY HANDLE TAPE CARRIER.

Cut No. 3.

A very neat little Instrument intended to facilitate the use of Corundum Tape, made upon the principle of a File Carrier, and answering the purpose admirably 3 50

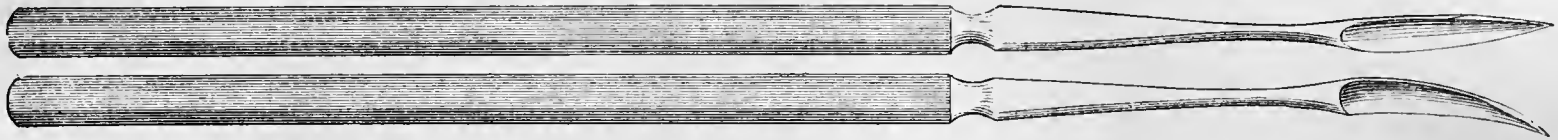
UNIVERSAL PORTE POLISHER.

Cut No. 4.

The Cut gives the size and form of the Instrument. It is made of polished steel, neat and durable. The advantages over the ordinary Porte Polishers are that the material used as a polisher can be shifted without trouble to any desired angle, and the piece of wood or stone may be flat, oval, or round, and held firmly in its place. Corundum Points, oval in form, and about a half inch in length, for cutting down fillings, removing superficial decay, and dressing filed or fractured surfaces of the teeth, adapted to this Instrument, will be furnished with the Porte Polisher if desired.

Universal Porte Polisher 1 00
Corundum Points, 25 in a box 40

Instruments used for separating Lamm's Crystallized Fibrous Gold. Cuts, the exact size of the Instruments . per pair $1 00



Abscess Lancets, Octagon Steel Handles . . . . . per pair $0 75

WEDGE CUTTER.—The Wedge for separating is now so frequently used that an Instrument is needed to cut off the excess of wood after it has been driven between the teeth. It is applicable both to the inside and outside of the jaw. Is of polished steel, and in all respects a beautiful and practical Instrument $2 25

FOIL SHEARS.

Steel, Japanned Handles, 8 inches	$1 00
Polished Steel, 8 inches	1 00
" " 9 "	2 00

REVOLVING HEAD SOCKET.

The Cut represents a short Revolving Head Socket for the palm of the hand, by means of which the *ordinary* Drill can be rotated without chafing the hand. It is preferred by many to the Bur Thimble, and has the advantage over the *long* Drill Stock, in that Bits are dispensed with.

Ebony Head	75
Ivory "	1 00

CORUNDUM TAPE.

A superior article of Corundum Tape. This saves much time, and for many fillings is superior to Files for finishing.

Per piece of two yards	08

SILEX AND BUCK-HORN TAPE.

Designed to follow the Corundum Tape. A finely polished surface can be obtained by their use.

Per piece of two yards	08

WATER-PROOF POLISHING TAPE.

After repeated experiments, we are now prepared to offer Tape covered with a variety of reducing and polishing powders for finishing fillings, held in contact with the Tape, by a preparation *which is not dissolved by moisture.* There are five grades, No. 1 being the finest, and No. 5 the coarsest. Put up in pieces of two yards $0 10

COTTON WOOD.

Recommended by those who have long used it as a superior Wood for carrying polishing powders; possessing the advantage, when wet, of retaining the powder; very useful in polishing fillings and teeth after the removal of tartar. Put up in packages of one dozen strips eight inches in length by a quarter of an inch square.

Per dozen 20

DENTISTS' NAPKINS.

Fine quality, all linen, Damask Napkins, $6\frac{1}{2}$ inches square. .	per doz.	1 00
Damask Napkins, $12\frac{1}{2}$ by $11\frac{1}{2}$ inches, cut and fringed . .	"	1 75
" " 12 inches square	"	1 50
Also, for the mouth, in square and oblong pieces, stitched to prevent raveling, the following varieties, made of fine Bird-Eye Diaper:		
Square, $3\frac{1}{4}$ inches	per doz.	40
" $5\frac{1}{2}$ "	"	80
Oblong, 4 " by 7 inches	"	80
Also, fine Bird-Eye Diaper Napkins, hemmed, $10\frac{1}{2}$ in. square .	"	2 00
Extra " " " " " " $10\frac{1}{2}$ in. " .	"	2 75
" " " " " " " $16\frac{1}{2}$ in. " .	"	5 00

PREPARED COTTON FOR DENTAL PURPOSES.

A good article of Cotton, adapted especially for a reliable absorbent for drying cavities preparatory to filling teeth . . . . per package 20

FLAX COTTON.

A beautiful article, much superior to any heretofore offered for dental purposes. . . . . per package 15

SPUNK FOR DRYING OUT CAVITIES.

A superior article for drying out cavities and absorbing saliva while filling teeth. This article has been tested by a number of leading Dentists in Europe and in this country, and is said to be superior to anything now in use for such purposes.

It is very valuable in absorbing the moisture in sensitive teeth, as the patient does not experience the pain produced by the application of paper or cotton . . . . . per ounce $0 20

BIBULOUS PAPER.

Direct importation from Paris.

Per ream 3 00
" quire 20

FRENCH RUBBER TUBING.

A large supply of assorted sizes best French Tubing, for dental purposes.

Per foot, all sizes 20

Also, American Rubber Tubing, for dental purposes, from 4 cents to 10 cents per foot.

COFFER-DAM RUBBER.

(Barnum's.)

A large supply of this popular article.

Per yard 3 00
" ounce (Troy) 50

DENTAL CASES.

HAVING devoted special attention to the manufacture of Dental Cases, we think our arrangements are so complete as to afford unequaled facilities for supplying the demands of the Profession in variety, quality, and price. We have secured skilled workmen, have large quantities of well-seasoned Wood, import Velvet direct for linings—the silk of Lyons manufacture, the cotton of English, silk finish.

They are mounted with Brass, or German Silver, so as to secure the best appearance with the greatest amount of strength, and are polished and finished throughout in a workmanlike manner. Our assortment includes Rosewood, Walnut, Mahogany, and Leather covered. Special styles will be made to order.

They will be fitted to order with Drawers, Trays, or apartments for Instruments, Phials, etc.

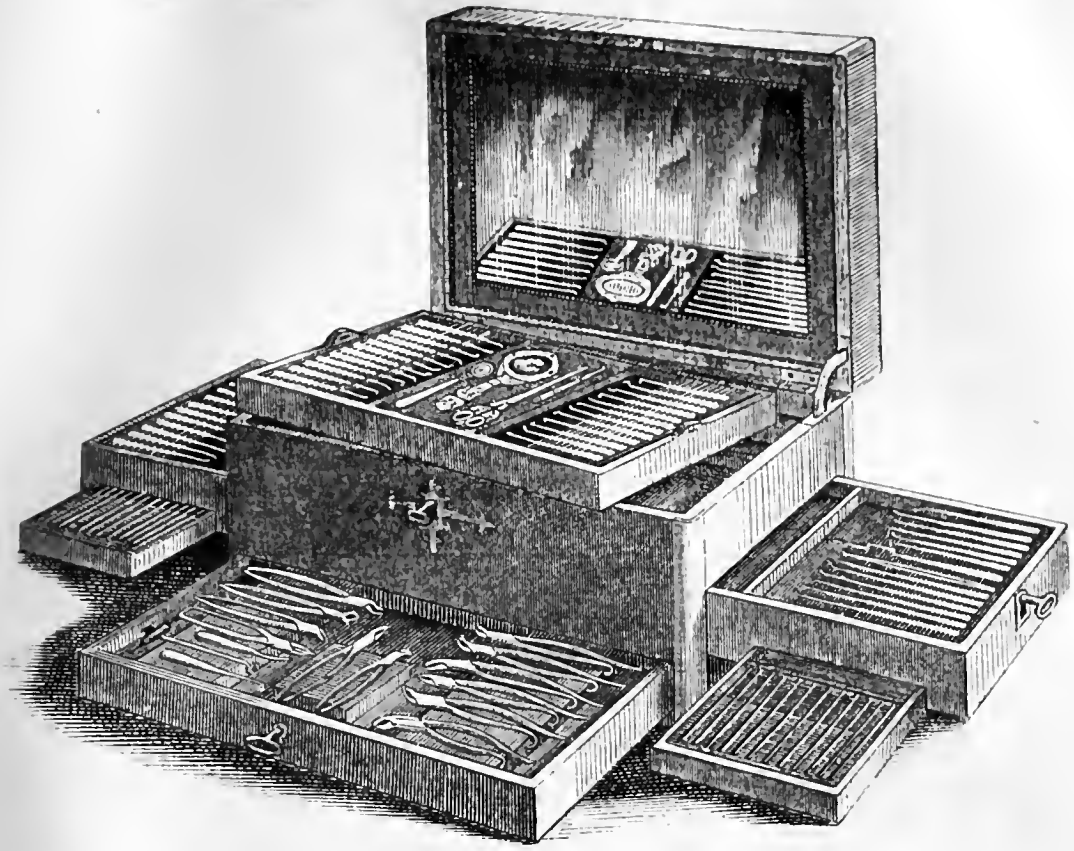
No charge is made for selecting the Instruments.

Our plan of affixing the price to each article in the list enables the purchaser to estimate the aggregate value of a Case and its contents, and to direct any variations from the ordinary styles that he may deem desirable.

We give descriptions of eight of the Cases in most general use, and are prepared to furnish others still more elaborate at prices ranging from Four Hundred to One Thousand Dollars.

NOTE.—When an order for a Case is received, the Instruments desired are selected especially for it, and blocks carved to fit each of them. The blocks are then fastened into the Case and covered with Velvet, so as to make a uniform lining throughout. *After this it is impossible to make changes, or add other instruments, without spoiling the Velvet.* The selection of Instruments should therefore be carefully made when giving the order, and any article which it is desired to have in the Case should be sent at the same time, that its shape may be carved in the wood before covering.

If desired, a Tray or Drawer may be left without lining, and the Velvet furnished for covering it. The purchaser can then have it fitted to suit himself; but this plan we have not found satisfactory as a rule. The better plan is to have all the work done at the same time and place.



This Cut represents a No. 1 Case.

Operating Case, No. 1.

*6	Five-eighth Inch Cameo Handle Scalers, Gold Plated Ferrules .	$70 00
18	" " " " " Pluggers and Burnishers, Gold Plated Ferrules . .	
1	Large Pearl Hand Mirror, Gold Mounted, No. 4	25 00
1	Pearl Mouth Glass, Stone set, " " 10	7 50
1	Pair Pearl Handle Foil Shears, " " 34	16 25
1	Pearl Handle Gum Lancet, " " 24	4 00
1	" Tongue Holder, Stone set, " " 21	2 25
2	Dozen large Steel Excavators, Octagon Handles, File-cut, at $3 25 per doz.	6 50
2	" Five-eighth Inch Ivory Handle Pluggers and Scalers, German Silver Ferrules, at $18 00 per doz.	36 00
1	Improved File Carrier, Ivory Handle	2 50
1	Foil Carrier and Plugger combined	1 75
1	Revolving Head Drill Socket, Ivory	2 25
2	Dozen Socket Drills, at $1 50 per doz.	3 00

* The same Case, with ⅝ inch Pearl Handle Pluggers and Scalers, $350.

2	Pair Forceps, Upper Molar, R. and L., Oct. Joints, Ex. Qual., No. 18	$5 00
1	" " Lower Molar, " " " 15	2 50
1	" " " Bicuspid, " " " 21	2 50
1	" " Upper " " " " 11	2 50
1	" " " Incisors, " " " 13	2 50
1	" " Lower " " " " 9	2 50
1	" " Dentes Sapientiæ, " " " 10	2 50
1	" " Excising, " " " 12	2 50
1	" " Roots, Straight, " " " 1	2 50
1	" " " Crooked, " " " 3	2 50
1	" Hullihen's Screw Forceps, " " . . .	3 75
2	Elevators, Ivory Handles, at $2 00 each	4 00
1	Improved Key, Ivory Handle	3 00
	In an extra fine Rosewood Case, 20 in. by 13½ in. by 8 in., full Brass-bound Corners and Edges, with five Drawers at the sides and front, with two Trays at the top, one with Compartments for Foil, Files, Teeth, etc., and with a Mirror in the Lid to reflect the Instruments in the top Tray. Lined with extra heavy Silk Velvet	85 00
		$300 **

Operating Case, No. 2.

*6	Half-inch Cameo Handle Scalers, Gold Plated Ferrules . .	
18	" " " " Pluggers and Burnishers, Gold Plated Ferrules	60 00
1	Large Pearl Hand Mirror, Gold Mounted, No. 9	15 75
1	Pearl Mouth Mirror, " " " 10½	7 25
1	Pair Pearl Handle Foil Shears, Gold Mounted, No. 38 . . .	14 00
1	Pearl Handle Gum Lancet, " " " 25 . . .	3 50
2	Dozen large Octagon Steel Excavators, File-cut Handles, at $3 25 per doz.	6 50
1	" Octagon Steel Pluggers, File-cut Handles	6 00
1	Revolving Head Drill Socket, Ivory	2 25
1	Improved File Carrier, Ivory Handle	2 50
1	Plugger and Foil Carrier combined	1 75
2	Dozen Socket Drills, at $1.50 per doz.	3 00
1	Silver Mounted Glass Syringe	4 50
2	Pair Forceps, Upper Molar, R. and L., Oct. Joints, Ex. Qual., No. 18	5 00
1	" " Lower Molar, " " " 15	2 50
1	" " " Bicuspid, " " " 21	2 50
1	" " Upper " " " " 11	2 50
1	" " " Incisors, " " " 13	2 50
1	" " Lower " " " " 9	2 50
1	" " Dentes Sapientiæ, " " " 10	2 50
1	" " Excising, " " " 12	2 50

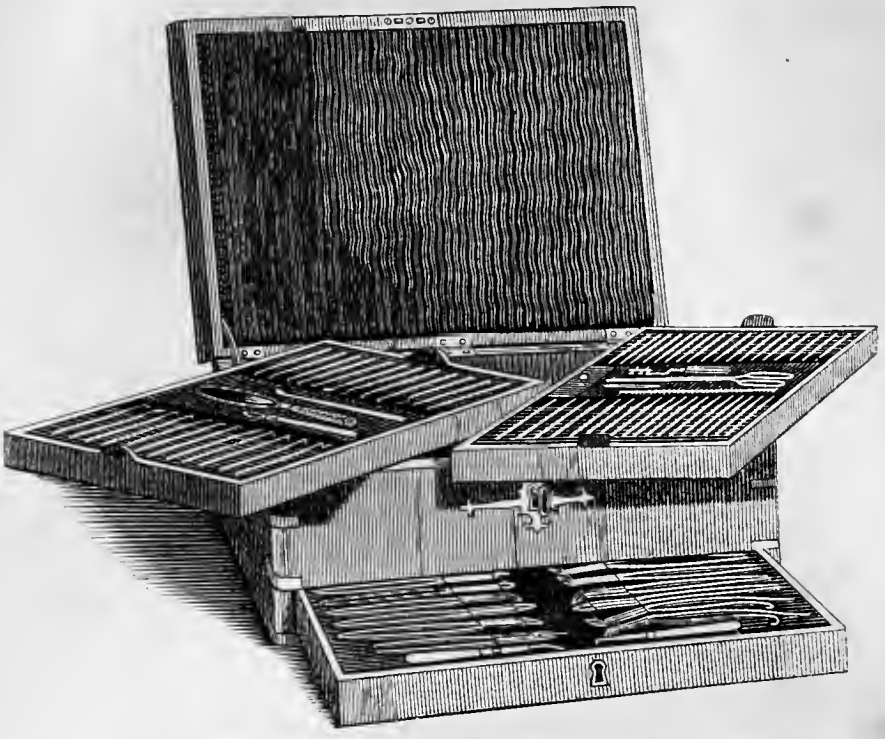
* The same Case, with half-inch Pearl Handle Pluggers and Scalers, $250.

1	Pair Forceps, Roots, Straight, Oct. Joints, Ex. Qual., No. 1	$2 50
1	" " " Crooked, " " " 3	2 50
1	" Hullihen's Screw Forceps, " "	3 75
2	Elevators, Ivory Handles, at $2 00 each	4 00
1	Improved Key, Ivory Handle	3 00
	In a fine Brass-bound Rosewood Case, 18½ in. by 12½ in. by 7 in., with three Trays and Drawer for Forceps. One of the Trays divided into Compartments for Foil, Files, Teeth, etc. Plate Glass Mirror in the Lid, and lined with heavy Silk Velvet	55 00
		$220 **

Operating Case, No. 3.

*6	Half-inch Cameo Handle Scalers, Gold Plated Ferrules	60 00
18	" " " Pluggers and Burnishers, Gold Plated Ferrules	
1	Pearl Hand Mirror, Gold Mounted, No. 18	11 25
1	" Mouth " " " " 19½	4 00
1	" Handle Gum Lancet, Gold Mounted, No. 25	3 50
1	Pair Steel Foil Shears	2 00
2	Dozen Steel Excavators, Octagon Handles, at $2 00 per doz.	4 00
1	" Small Steel Pluggers, Octagon, File-cut	5 00
1	Improved File Carrier, Ivory Handle	2 50
1	Foil Carrier and Plugger combined	1 75
2	Dozen Socket Drills, at $1 50 per doz.	3 00
1	Revolving Head Drill Socket, Ivory	2 25
2	Pair Forceps, Upper Molar, R. and L., Oct. Joints, Ex. Qual., No. 18	5 00
1	" " Lower " " " " 15	2 50
1	" " " Bicuspid, " " " 21	2 50
1	" " Upper " " " 11	2 50
1	" " " Incisors, " " " 13	2 50
1	" " Lower " " " 9	2 50
1	" " Dentes Sapientiæ, " " 10	2 50
1	" " Excising, " " " 12	2 50
1	" " Roots, Straight, " " " 1	2 50
1	" " " Crooked, " " " 3	2 50
1	" Hullihen's Screw Forceps, " "	3 75
2	Elevators, Octagon Ebony Handles, at $1 25 each	2 50
1	Improved Key, "	2 00
	In a fine Brass-bound Rosewood Case, 18½ in. by 12½ in. by 7 in., with three Trays, one of them stationary, and divided into Compartments for Foil, Teeth, etc., and Drawer for Forceps. Lined with heavy Silk Velvet	50 00
		$185 00

* The same Case, with ½ inch Pearl Handle Pluggers and Scalers, $215.



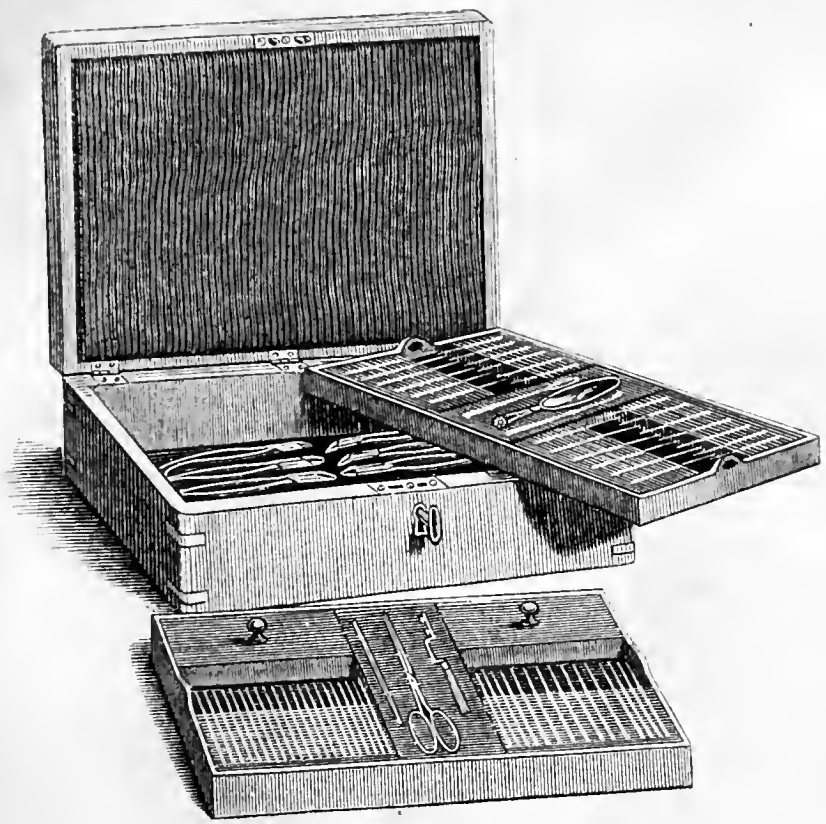
This Cut represents a No. 4 Case.

Operating Case, No. 4.

6	Five-eighth Inch Oct. Ivory Handle Scalers, German Silver Ferrules	
18	" " " " Pluggers and Burnishers, German Silver Ferrules .	$36 00
1	Pearl Hand Mirror, No. 16	8 00
1	" Mouth Glass, " 19	2 50
1	" Gum Lancet, " 28	2 00
1	Pair Steel Foil Shears	2 00
2	Dozen Steel Excavators, Octagon Handles, File-cut, at $3 25 per dozen	6 50
1	" Small Steel " Taper Pluggers, File-cut Handles .	5 00
1	Improved File Carrier, Ivory Handle	2 50
1	Pair Spring Plug Pliers	50
2	Dozen Socket Drills, at $1 50 per dozen	3 00
1	Revolving Head Drill Socket, Ivory	2 25
2	Pair Forceps, Upper Molar, R. and L., Oct. Joints, Ex. Qual., No. 18	5 00
1	" " Lower " " " " 15	2 50
1	" " " Bicuspid, " " " 21	2 50
1	" " Upper " " " " 11	2 50
1	" " " Incisors, " " " 13	2 50
1	" " Lower " " " " 14	2 50
1	" " Dentes Sapientiæ, " " " 10	2 50
1	" " Excising, " " " 12	2 50

1	Pair Forceps, Roots, Straight, Oct. Joints, Ex. Qual., No. 1	$2 50
1	" " " Crooked, " " " 3	2 50
1	" Hullihen's Screw Forceps, " "	3 75
2	Elevators, Octagon Ebony Handles, at $1 25 each	2 50
	In a fine Brass-bound Rosewood Case, 18½ in. by 12½ in. by 7 in., with three Trays, one of them stationary and divided into Compartments for Foil, Teeth, etc., and Drawer for Forceps. Lined with Silk Finish Cotton Velvet	36 00
		$140 00

This Case, lined with heavy Silk Velvet, and Mirror in Lid, $160.



This Cut represents a No. 5 Case.

Operating Case, No. 5.

6	Half-inch Ivory Handle Scalers, German Silver Ferrules	30 00
17	" " " Pluggers and Burnishers, Ger. Sil. Ferrules	
1	" " " Socket for Drills " "	
1	Pearl Hand Mirror, No. 15	7 00
1	" Mouth Mirror, " 19	2 50
1	" Lancet, " 28	2 00
1	Pair Steel Foil Shears	2 00
2	Dozen Steel Excavators, Octagon Handles, at $2 00 per dozen	4 00

1	Dozen Octagon Steel Pluggers, File-cut Handles	$5 00
1	Improved File Carrier, Ivory Handle	2 50
1	Pair Spring Plug Pliers	50
2	Dozen Socket Drills, at $1 50 per dozen	3 00
2	Pair Forceps, Upper Molar, R. and L., Oval Joints, First Qual., No. 18	4 00
1	" " Lower " " " " 15	2 00
1	" " " Bicuspid and Incisor, " " " 14	2 00
1	" " Upper " " " " 11	2 00
1	" " Dentes Sapientiæ, " " " 10	2 00
1	" " Excising, " " " 12	2 00
1	" " Roots, Straight, " " " 1	2 00
1	" " " Crooked, " " " 2	2 00
1	" " Half Curved Alveola, " " " 39	2 00
2	Elevators, Octagon Ebony Handles, at $1 25 each	2 50
1	Stump Screw, " "	1 25
	In a Brass-bound Rosewood Case, 16½ in. by 11 in. by 4½ in., with two Trays, and space for Forceps. Lined with Silk Finish Cotton Velvet	28 00
		$110 **

Operating Case, No. 6.

6	Bleached Bone Handle Scalers, German Silver Ferrules	20 00
17	" " Pluggers and Burnishers, Ger. Sil. Ferrules	
1	" " Socket for Drills, " "	
1	Pearl Mouth Glass, No. 19	2 50
1	" Hand Mirror, " 15	7 00
1	" Gum Lancet, " 28	2 00
2	Dozen Socket Drills and Burs, at $1 50 per dozen	3 00
1	" Steel Excavators, Octagon Handles	2 00
1	Improved File Carrier, Ivory "	2 50
1	Pair Spring Plug Pliers	50
2	" Forceps, Upper Molar, R. and L., Oval Joints, First Qual., No. 18	4 00
1	" " Lower " " " " 15	2 00
1	" " Upper Bicuspid and Incisors, " " " 11	2 00
1	" " Lower " " " " " " 14	2 00
1	" " Roots, Straight, " " " 1	2 00
1	" " " Crooked, " " " 2	2 00
1	" " Excising, " " " 12	2 00
1	" " Dentes Sapientiæ, " " " 10	2 00
2	Elevators, Octagon Ebony Handles, at $1 25 each	2 50
1	Improved Key, "	2 00
	In a Brass-bound Rosewood Case, 16½ in. by 11 in. by 4½ in., two Trays, and space for Forceps. Lined with Silk Finish Cotton Velvet	28 00
		$90 00

N. B.—A pair of Forceps may be substituted for the Key, if desired.

Operating Case, No. 7.

6	Bleached Bone Handle Scalers, German Silver Ferrules	
17	" " Pluggers and Burnishers, Ger. Sil. Ferrules	$20 00
1	" " Socket for Drills, " "	
1	Pearl Mouth Glass, No. 19	2 50
1	" Gum Lancet, " 28	2 00
1	Rosewood Hand Mirror, 4½ inch	90
2	Dozen Socket Drills and Burs, at $1 50 per dozen	3 00
18	Steel Excavators, Octagon Handles, at $2 00 per dozen	3 00
1	Pair Spring Plug Pliers	50
2	" Forceps, Upper Molar, R. and L., Oval Joints, First Qual., No. 18	4 00
1	" " Lower " " " " 15	2 00
1	" " " Bicuspid, " " " 14	2 00
1	" " Upper Bicuspid and Incisors, " " " 11	2 00
1	" " Roots, Straight, " " " 1	2 00
1	" " " Crooked, " " " 2	2 00
1	" " Excising, " " " 12	2 00
2	Elevators, Round Ebony Handles, at 63 cents each	1 25
1	Improved Key, "	2 00
	In a Brass-bound Mahogany Case, 16½ in. by 11 in. by 4½ in., two Trays, and space for Forceps. Lined with Silk Finish Cotton Velvet	24 00
		$75 **

N. B.—A pair of Forceps may be substituted for the Key, if desired.

Operating Case, No. 8.

11	Bone Handle Scalers, Burnishers, and Pluggers, Ger. Sil. Ferrules	7 50
1	" " Socket for Drills, " "	
12	Large Steel Pluggers, Octagon File-cut Handles, ⅜ inch	7 50
1	Pearl Mouth Glass, No. 19	2 50
1	" Gum Lancet, " 28	2 00
18	Socket Drills, best quality, at $1 50 per dozen	2 25
1	Dozen Steel Excavators, Octagon Handles	2 00
2	Pair Forceps, Upper Molar, R. and L., Oval Joints, First Qual., No. 18	4 00
1	" " Lower " " " " 15	2 00
1	" " " Bicuspid and Incisors, " " 14	2 00
1	" " Upper " " " " " 11	2 00
1	" " Roots, " " " 2	2 00
1	" " Excising, " " " 12	2 00
2	Elevators, Round Ebony Handles, at 63 cents each	1 25
1	Improved Key, "	2 00
	In a Brass-bound Mahogany Case, 16½ in. by 11 in. by 4½ in., two Trays, and space for Forceps. Lined with Silk Finish Cotton Velvet	24 00
		$65 00

N. B.—A pair of Forceps may be substituted for the Key, if desired.

Operating Case, No. 9.

A PRACTICAL OUTFIT FOR OPERATIVE DENTISTRY,

In a compact form, selected by a first-class Operator. To be added to or curtailed, as may be desired. Designed for a Traveling or Country Dentist.

A	Brass-bound Rosewood Case, 18½ in. by 12½ in. by 7 in.	$38 00
1	Five-inch Rosewood Plate Glass Hand Mirror	1 00
1	Pearl Mouth Mirror, No. 11	2 10
1	" Cheek Holder or Spatula, No. 31	1 00
1	Pair Cast Steel Foil Scissors	1 00
1	Rubber Syringe, Silver Point	1 50
1	Universal Porte Polisher, and Box Corundum Points	1 40
1	Half Round Corundum File	30
1	Arkansas Stone for sharpening	50
18	Five-eighth Inch Ebony Handle Pluggers	15 00
12	One-quarter Inch File-cut " "	6 00
12	Three-sixteenth Inch Octagon Handle Steel Pluggers	3 00
15	Dr. Atkinson's Pluggers, assorted, suitable for Foil, Sponge, or Shred Gold, and one Mallet	5 25
12	One-quarter Inch File-cut Handle Amalgam Pluggers	6 00
2	" " " " Burnishers	1 00
3	" " " " Chisels	1 50
3	" " " " Scalers	1 50
1	Set of twenty-four Nerve Extractors and Fang Fillers, Drawn and Spring Temper	5 00
24	Plain Octagon Handle Excavators	4 00
12	" " Burs	2 00
6	" " Extra Fine-cut Burs	1 00
2	Pivot Drills, Octagon Handle	33
2	Nerve Cavity Drills, Spear Point	33
1	Taper Steel Handle Plug Finishing Bur	70
3	Molar Files, assorted	75
3	Bicuspid Files, assorted	50
12	Separating Files, assorted	1 00
6	Flat Oval Plug Finishing Files, assorted	1 00
6	Double end Plug Finishing Files, assorted	1 20
3	Stump Files, assorted	0 50

1	Foil Carrier and Plugger combined	$1 75
1	Pair Small Flat Nose Pliers	40
1	Bur Thimble, Steel	60
1	Extension Thimble, Vulcanized Rubber	50
1	Tongue Holder, Flagg's	2 00
1	Lip Protector	75
1	Wedge Cutter, Polished Steel	2 25
10	Pair Octagon Joint Forceps	25 00
3	Elevators, Ebony Handles (Hook, Punch, and Screw)	3 75
1	Gum Lancet, "	50
1	Pair Abscess Lancets, Octagon Steel Handles	75
6	Pieces each Cotton and Orange Wood	17
2	" " Corundum and Silex Tape	32
1	Box each Pumice and Silex	20
1	Phial each Creasote, Perchloride Iron, Nerve Paste	1 25
1	Oz. Rubber Dam for keeping Cavities dry	50
6	Inches assorted French Rubber Tubing, for regulating	10
1	Book Gold Foil (say)	6 00
1	" Tin "	50
1	Oz. Townsend's Amalgam	2 00
1	Mercury Holder, filled	50
¼	Oz. Hill's Stopping (for temporary Fillings)	1 25
50	Assorted Pivot Teeth	4 00
1	Box Pivot Wood	50
1	Piece Ivory for Pivot Gauge	1 00
1	Box selected Asbestos (used as a non-conductor under Fillings)	10
1	Quire Bibulous Paper (for drying Cavities)	20
1	Oz. Spunk (for drying Cavities)	20
½	Dozen Linen Napkins, each, large and small	1 25
1	" Common Tooth Brushes	1 25
	Chamois Skins for Instruments	1 20
		$165 **

Cases can be furnished at still lower prices than No. 8, but they do not as a rule give satisfaction. The variety of Instruments is limited, and the quality necessarily inferior, much of the outlay being in the Case and fitting.

Those who wish a set of Instruments at a small cost, would do well to make a selection from the Catalogue, and have them inclosed in a Morocco-covered Box, or a neat Rolling Case.

PHYSICIANS' OR DENTISTS' PORTABLE EXTRACTING CASE.

Consisting of seven pairs of Forceps, Harris' pattern—all straight Handles, and can be used on either side.

This set is sufficient for all ordinary cases of extraction.

Put up with Gum Lancet in a neat, strong Walnut Box, with lock and key.

Outside measurement of Case, 9½ in. by 8 in. by 2 in.

Octagon Joints	$23 00
Oval "	20 00

EMPTY DENTAL CASES.

Lined and fitted; ready for Instruments.

Mahogany; 2 Trays, and space for Forceps, 16½ inches long, 11 inches wide, and 4½ inches deep, lined with French Cotton Velvet	24 00
Rosewood; same size, lined with French Cotton Velvet	28 00
Rosewood; 1 Drawer and 3 Trays, one stationary and divided into Compartments: 18½ inches long, 12½ inches wide, and 7 inches deep; lined with French Cotton Velvet	36 00
Rosewood; same size and description, lined with extra heavy Silk Velvet	50 00
Rosewood; 5 Drawers and 2 Trays, one stationary and divided into Compartments: 20 inches long, 13½ inches wide, and 8 inches deep, with heavy Brass Mountings, Corners and Edges; lined with extra heavy Silk Velvet	85 00

Rosewood; same size and description, with heavy German Silver Engraved Mountings, Corners and Edges, a very beautiful and substantial Case $125 00

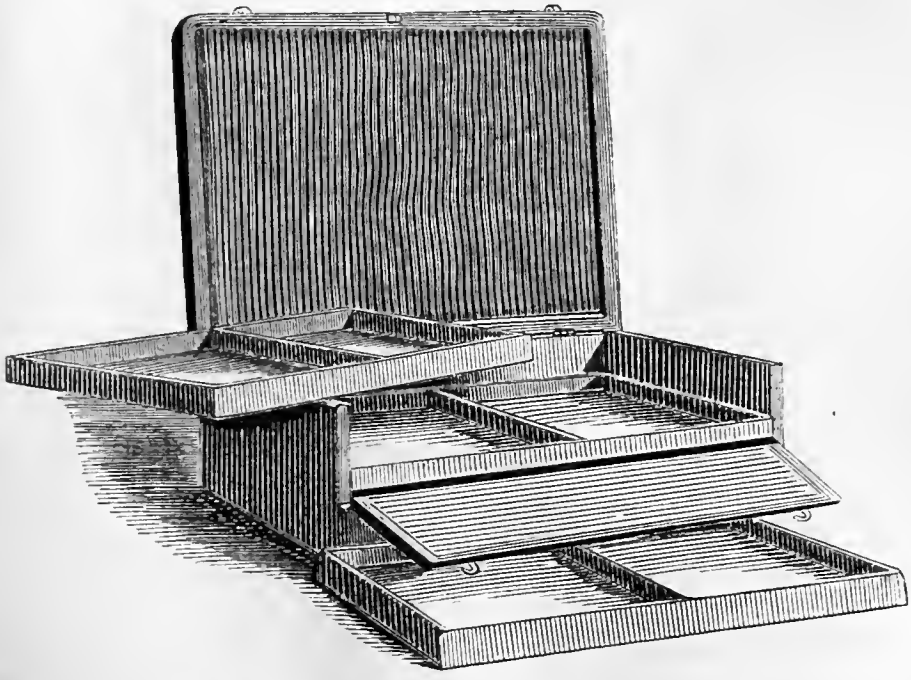
Cases covered with Muslin, Skiver, Turkey Morocco, Russia Leather, etc., for Students, Dentists, and Physicians, made to order, from . . . . . 5 00 to 20 00

Rolling Cases for Instruments, lined with Chamois, 5 Spaces . . 1 50
" " " " " 7 " . . 1 75
" " " " " 9 " . . 2 00
" " " " " 12 " . . 2 25
" " " " " 15 " . . 3 00
" " " " " 20 " . . 4 00

Any other size made to order.

Valises made of Sole Leather, with Iron Frames, for Dental Cases, from . . . . . 7 00 to 12 00

THREE-TRAY STUDENTS' CASES.



Covered with Morocco and lined with Cotton Velvet, of the following sizes:

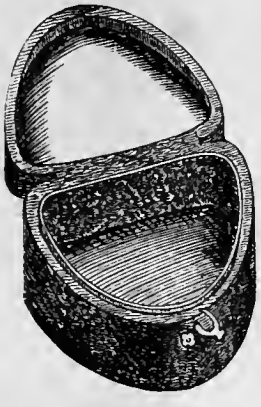
10 inches by 6 inches by 4 inches 6 00
11 " 7 " 5 " 7 00
12 " 9 " 5 " 7 50

STUDENTS' PORTABLE CASE.

Made in the form of a Valise, the frame is of Wood, covered with Morocco. Outside measurement, when closed, 12 inches long, 9 inches wide, and 3½ inches deep. The Case is divided in the centre, each half having a cover to protect the Instruments. Lined with Cotton Velvet . . $12 00

MOROCCO TEETH CASES.

For Artificial Teeth.



Half Oval.

Half Oval, Satin and Silk Velvet lined, 3¼ inches in length by 2½ inches in width by 1 inch in depth, Brass Hinge . . each 65

Half Oval, Cotton Velvet lined, 3 inches in length by 2½ inches in width by 1½ inch in depth, Leather Hinge . . . . each 35

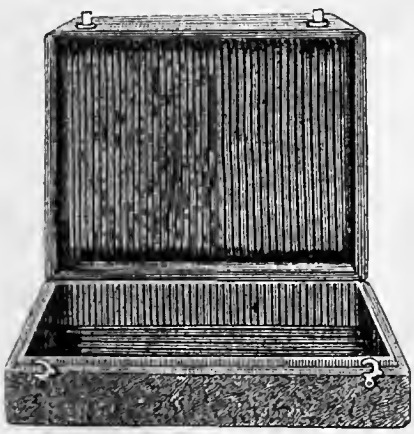
Half Oval, Cotton Velvet lined, $3\frac{1}{2}$ inches in length by $2\frac{3}{4}$ inches in width by $1\frac{1}{2}$ inch in depth, Leather Hinge . . . . . each $0 35

Half Oval Card Boxes (paper), lined, 3 inches in length by 2 inches in width by $1\frac{1}{8}$ inch in depth . . . . . per dozen 1 75

Oval.

Oval, Satin and Silk Velvet lined, $4\frac{1}{2}$ inches in length by $3\frac{1}{4}$ inches in width by $1\frac{1}{4}$ inch in depth, Brass Hinge . . . . . each 85

Oval Card Boxes (paper), lined, $3\frac{3}{4}$ inches in length by 3 inches in width by 1 inch in depth . . . . . per dozen 2 00



Oblong.

Oblong, Satin and Silk Velvet lined, $4\frac{1}{2}$ inches in length by $3\frac{1}{2}$ inches in width by $1\frac{5}{8}$ inch in depth, Brass Hinge . . . . each 85

Oblong Card Boxes (paper), lined, 4 inches in length by 3 inches in width by 1 inch in depth . . . . . per dozen 2 00

Oblong Card Boxes (paper), lined, 3 inches in length by $2\frac{1}{4}$ inches in width by $\frac{3}{4}$ inch in depth . . . . . per dozen 1 50

PEARL GOODS.

Our assortment of articles in this line is very extensive—having unequaled facilities for their manufacture.

PEARL HAND MIRRORS.

This Cut represents No. 1, half the size, front and back view.

No. 1.	Gold Mounted, Saw pierced, Stone set, carved on both sides . .	$40 00
No. 2.	" " " " " . .	35 00
No. 3.	" " "	27 00
No. 4.	" " "	25 00

This Cut represents No. 8, 9½ inches long and 4 inches wide.

No.	5.	Gold Mounted, Setting in Ferrule	$11 50
No.	5½.	" " 3 Rosettes	12 50
No.	6.	" without Setting	10 00
Nos.	7, 8.	" Saw pierced, Setting, 3 Rosettes	21 00
No.	9.	" Setting, 3 Rosettes	15 75
No.	9½.	" " "	20 00
No.	10.	" "	14 00
No.	11.	Silver Mounted, plain Handle	10 00
No.	12.	Gold Mounted, large, Setting, 3 Rosettes	22 50
Nos.	13, 14.	Gold or Silver Mounted, without Setting	15 00

This Cut represents No. 15, half the size.

No. 15.	Silver Mounted, small, plain Handle	$7 00
No. 16.	" large, " "	8 00
No. 17.	" larger, " "	10 00
No. 18.	Gold Mounted, without Setting	11 25
No. 19.	Silver " plain Rim	9 00
No. 20.	" " carved Rim	11 00

Extra large, beautifully carved on both sides, and Stone set, from $50 00 to 75 00

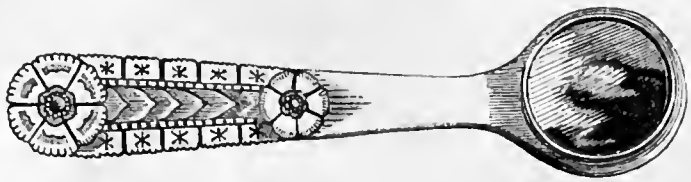
PEARL MOUTH MIRRORS.

This Cut represents No. 10, half the size.

No. 10.	Star pattern, carved on both sides, Gold Lyre, double Glass, jointed, 2 Rosettes	7 50
No. 10½.	Star pattern, carved on both sides, Gold Lyre, double Glass, jointed, 1 Rosette	7 25

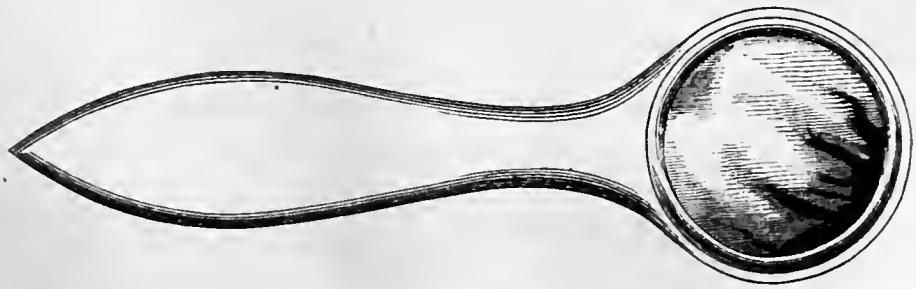
This Cut represents No. 11, full size.

No. 11. Plain, oval Glass, Pocket, Silver Mounted $2 00
No. 11½. " " " Gold " 2 50



This Cut represents No. 12, half the size.

No. 12. Star pattern, round Glass, Gold Mounted, 2 Rosettes . . 3 50
No. 12½. " " " " 2 " Magnifying 4 00
No. 12¾. " oval " " 2 " " . 4 25
No. 13. Figured, round Glass, Gold Mounted, 1 Rosette . . . 3 00
No. 13½. " oval " " 1 " Magnifying . 3 50
No. 14. Dolphin, round " " 2 30
No. 15. " " " " Magnifying . . . 2 75
No. 16. " " " Silver Mounted 2 00
No. 17. " small, round Glass, Silver Mounted 1 90



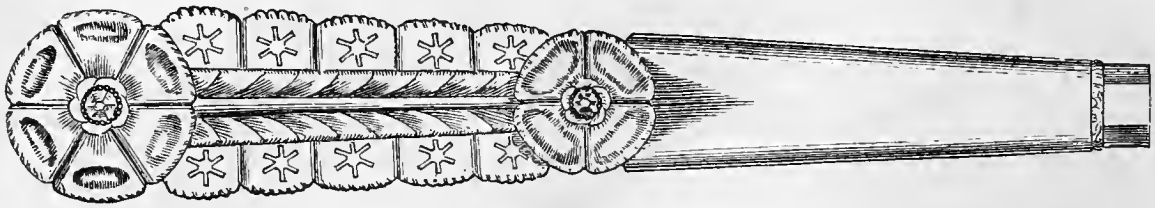
This Cut represents No. 18, full size.

No. 18. Plain, round Glass, Pocket, Silver Mounted 1 50

This Cut represents No. 19, half the size.

No. 19.	Plain, double Glass, jointed, Silver Mounted	$2 50
No. 19½.	Figured, " " Gold "	4 00
No. 19¾.	Dolphin, " " " "	4 25
No. 21.	Plain, oval Glass, Pocket, " " Magnifying	3 00
No. 21½.	" " " Silver " "	2 50
No. 22.	Dolphin, oval Glass, Gold Mounted, Magnifying	3 25
No. 23.	Figured, " " "	3 75
No. 24.	Dolphin, Gold Mounted, jointed, 1 plain Glass, 1 Magnifying	4 75
No. 24½.	Figured, " " 1 " 1 "	4 50
No. 25.	Plain, round Glass, Pocket, Gold Mounted, Magnifying	2 25
No. 26.	Figured, Silver Mounted, jointed, 1 plain Glass, 1 Magnifying	3 25
No. 26½.	Plain, " " 1 " 1 "	3 00
No. 27.	Star pattern, Gold Lyre, " 1 " 1 "	8 00

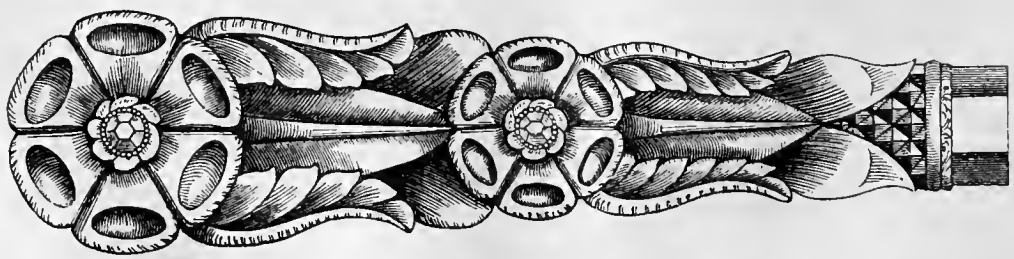
PEARL HANDLES FOR LANCETS.



This Cut represents No. 24, full size.

No. 24.	Star pattern, carved on both sides, Gold Ferrule, 2 Rosettes	$3 00
No. 25.	Shell " " " " 1 Rosette	2 50
No. 26.	Dolphin " " " " 1 Rosette	2 35
No. 27.	Fish " " " "	2 20
No. 29.	Dolphin " " " "	2 20
No. 28.	Plain, Silver Ferrule	1 00

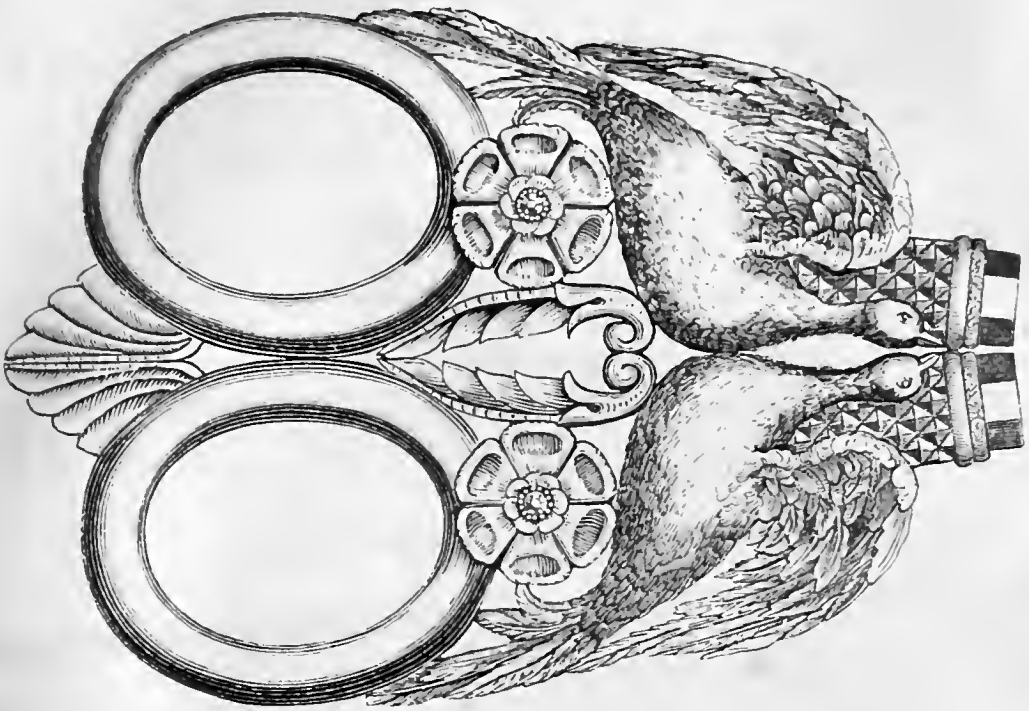
PEARL HANDLES FOR SCALERS.



This Cut represents No. 36, full size.

No. 35. Shell pattern, carved on both sides, Gold Ferrule, 1 Rosette, per doz.		$60 00
No. 36. Fancy " " " " 2 Rosettes "		66 00
No. 37. Dolphin " " " " 1 Rosette "		48 00

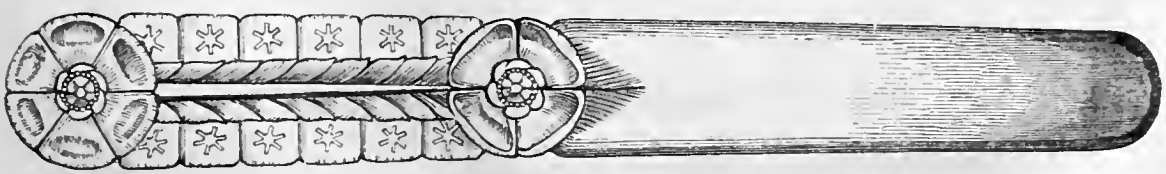
PEARL HANDLES FOR SCISSORS.



This Cut represents No. 34, full size.

No. 33. Dog pattern, carved on both sides, Gold Ferrules	$7 50
No. 34. Bird " " " " 2 Rosettes .	11 25
No. 38. Scroll " " " " " . .	9 00
No. 39. Dolphin " " " " " . .	7 00

PEARL TONGUE OR CHEEK HOLDERS.



This Cut represents No. 21, three-fourths the size.

No. 21. Star pattern, 2 Rosettes	$2 25
No. 22. Fancy " 1 Rosette	1 75
No. 23. Dolphin " 1 "	1 75
No. 30. Fancy "	80
No. 31. " "	1 00
No. 32. Dolphin "	1 25

PEARL HANDLES FOR INSTRUMENTS.

Octagon, plain taper, Gold Ferrules, $\frac{5}{8}$ inch . . .	per dozen	$50 00
" " " $\frac{1}{2}$ " . . .	"	35 00
" tapering each way from the centre, Gold Ferrules, $\frac{3}{8}$ inch	"	22 00
Revolving Head Drill Socket, Gold Ferrule	each	6 50

The above, with Solid Gold Ferrules, from $6 to $8 per dozen additional.

CAMEO HANDLES FOR INSTRUMENTS.

A beautiful article, preferred by many to Pearl.

Octagon, plain taper, Gold Ferrules, $\frac{5}{8}$ inch . . .	per dozen	$25 00
" " " $\frac{1}{2}$ " . . .	"	20 00

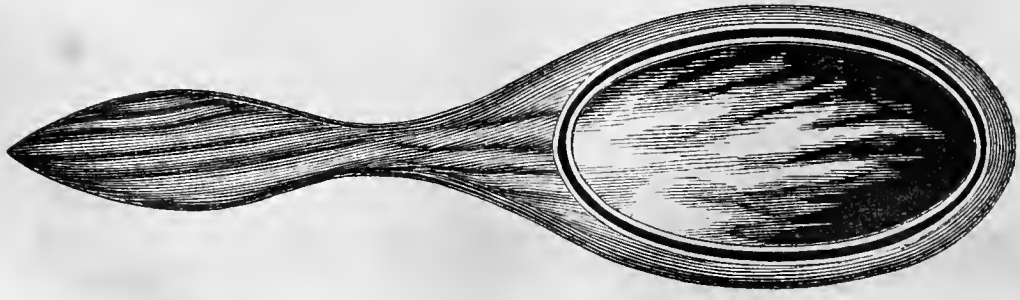
The above, with Solid Gold Ferrules, from $6 to $8 per dozen additional.

HAND MIRRORS.

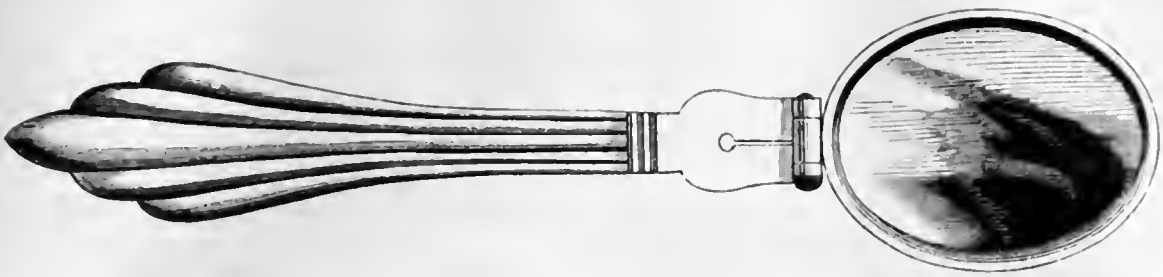
Imported direct from Paris.

Rosewood, Plate Glass, $4\frac{1}{2}$ inch	each	90
" " 5 "	"	1 00
" " $5\frac{1}{2}$ "	"	1 20
" " 6 "	"	1 50

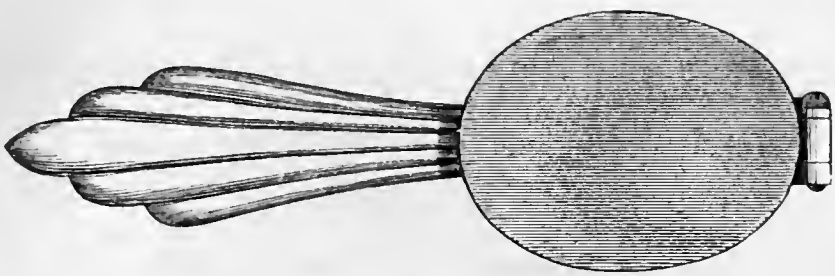
MOUTH MIRRORS.



Rosewood, plain Glass	each	$0 25

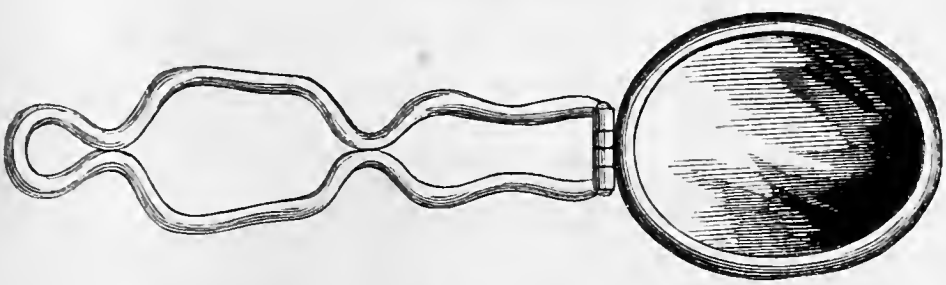


Open.



Closed.

German Silver Frame and Handle, jointed, Magnifying Glass . each $2 50



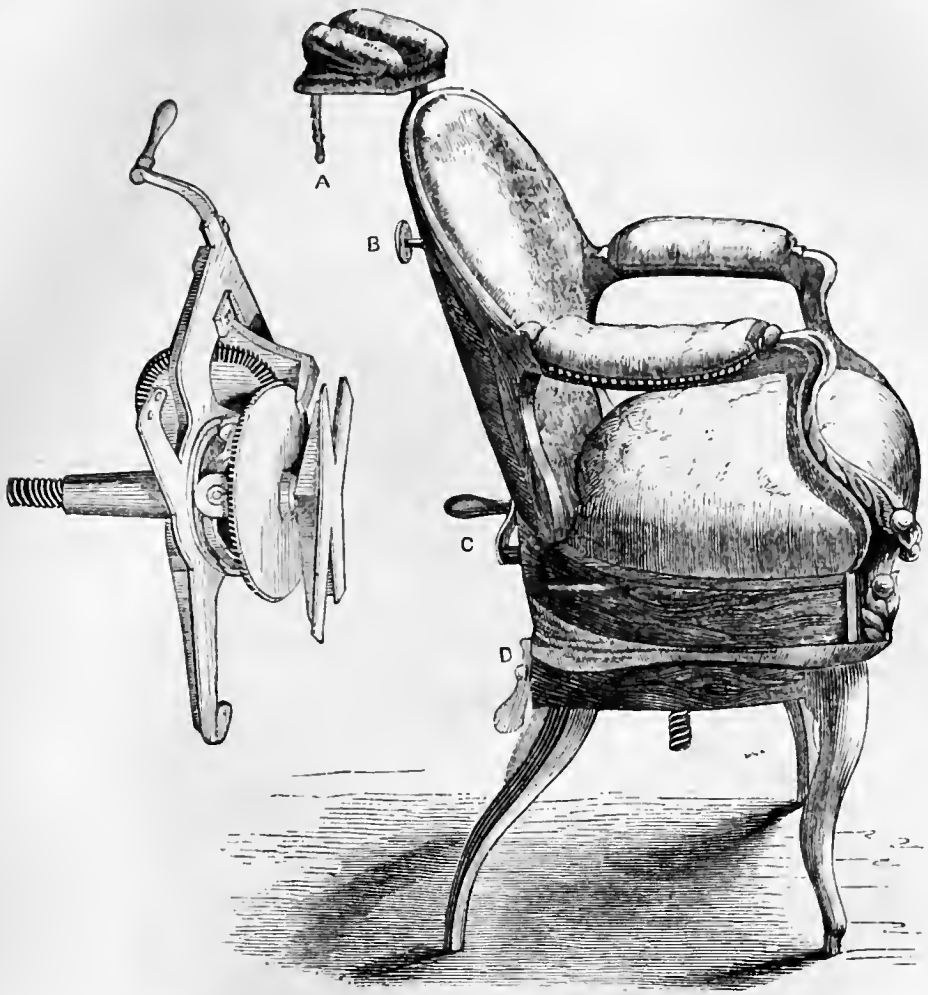
German Silver Wire Handle, Silver Frame, double Glass, jointed . each $1 00

Ebony Handle, German Silver Frame, with Ball-and-socket Joint, Magnifying Glass . . . . . each $2 50

DENTAL CHAIRS.

DENTAL CHAIR.

No. 1.



Above we give Cut of a Chair of our own design, and manufactured exclusively for us. It is capable of the following movements:

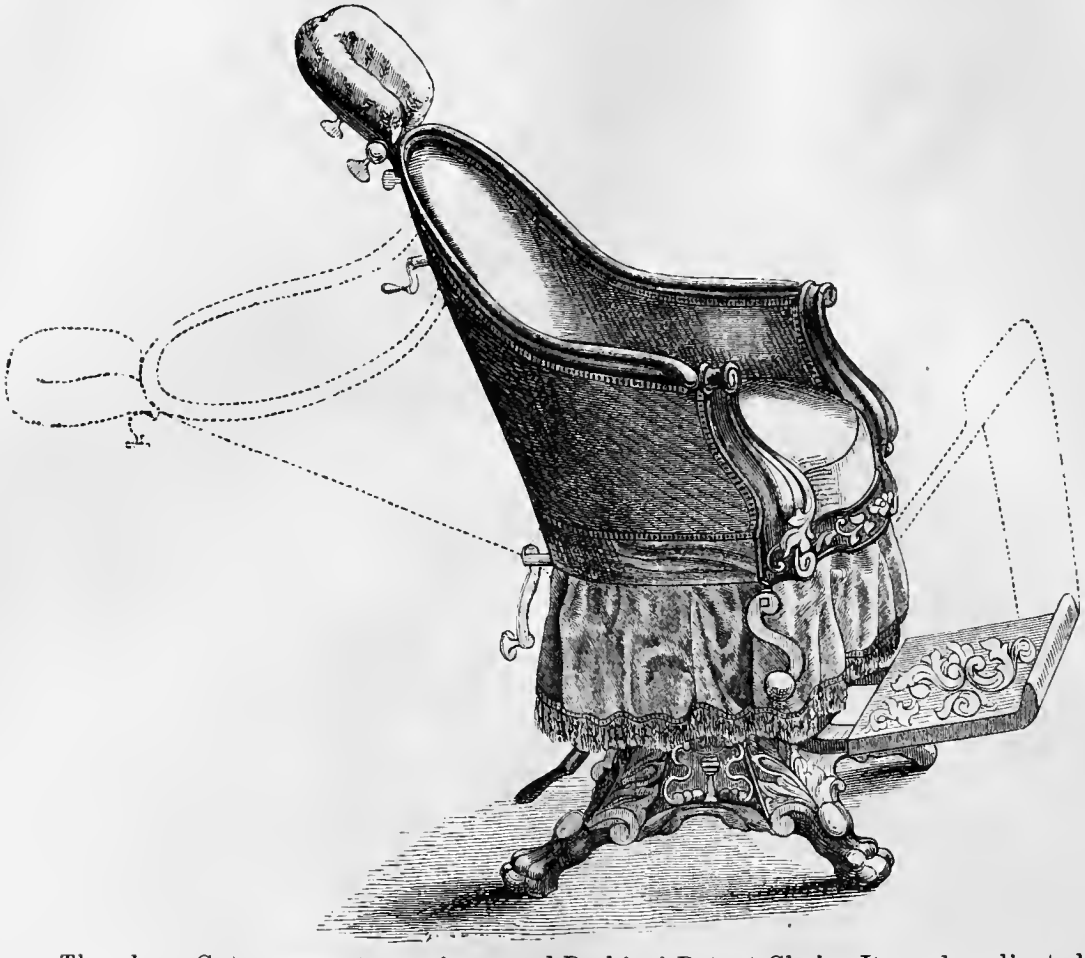
The Head-rest is moved forward and backward by means of a Rachet, A, and raised and lowered by a Slide, and held in the desired position by the Screw, B. The Seat is raised or lowered by means of the Crank, C. The Apparatus used for raising the Seat in this Chair (shown by the Cut) is a powerful and efficient arrangement. D is a Foot-lever operating upon a screw, by means of which the Chair (seat, arms, and back) may be placed at any necessary angle. These Chairs are of Walnut stained to imitate Rosewood, Walnut oil finish, Walnut varnished, and Mahogany, covered with a superior article of crimson or green Plush, and upholstered and finished throughout in the best style.

		$85 00
Finished with Silver-headed Nails	extra	2 00
Boxing	"	4 50

NOTE.—These are Philadelphia prices, freight and other expenses to be added when sold at other Depots.

PERKINS' IMPROVED DENTAL CHAIR.

No. 2.



The above Cut represents our improved Perkins' Patent Chair. It can be adjusted to any desired angle, from its upright position backward, to an angle of about 41 degrees; either side, 43 degrees; and obliquely, to 43 degrees, by means of a Ball-and-socket Joint which unites the Chair to its Base (which is of cast iron, bronzed), and is retained in any of these positions by a Double Screw, which is controlled by the foot of the Operator. The Seat and Foot-board are separately raised or lowered by means of Silver-plated Cranks. The machinery used for raising the Seat is a powerful Apparatus, and, like that used for raising the Foot-board, secures a rapid movement, and requires but little force from the Operator. The Head-rest is also raised or lowered by a Silver-plated Crank, and is so arranged as to be moved backward, forward, and sideways, and is held in position by Set Screws. The Curtain is intended to conceal the machinery. These Chairs are made of Mahogany, Walnut and Rosewood, are covered with superior crimson or green Plush, upholstered in the best style, and warranted to be stuffed with Hair only.

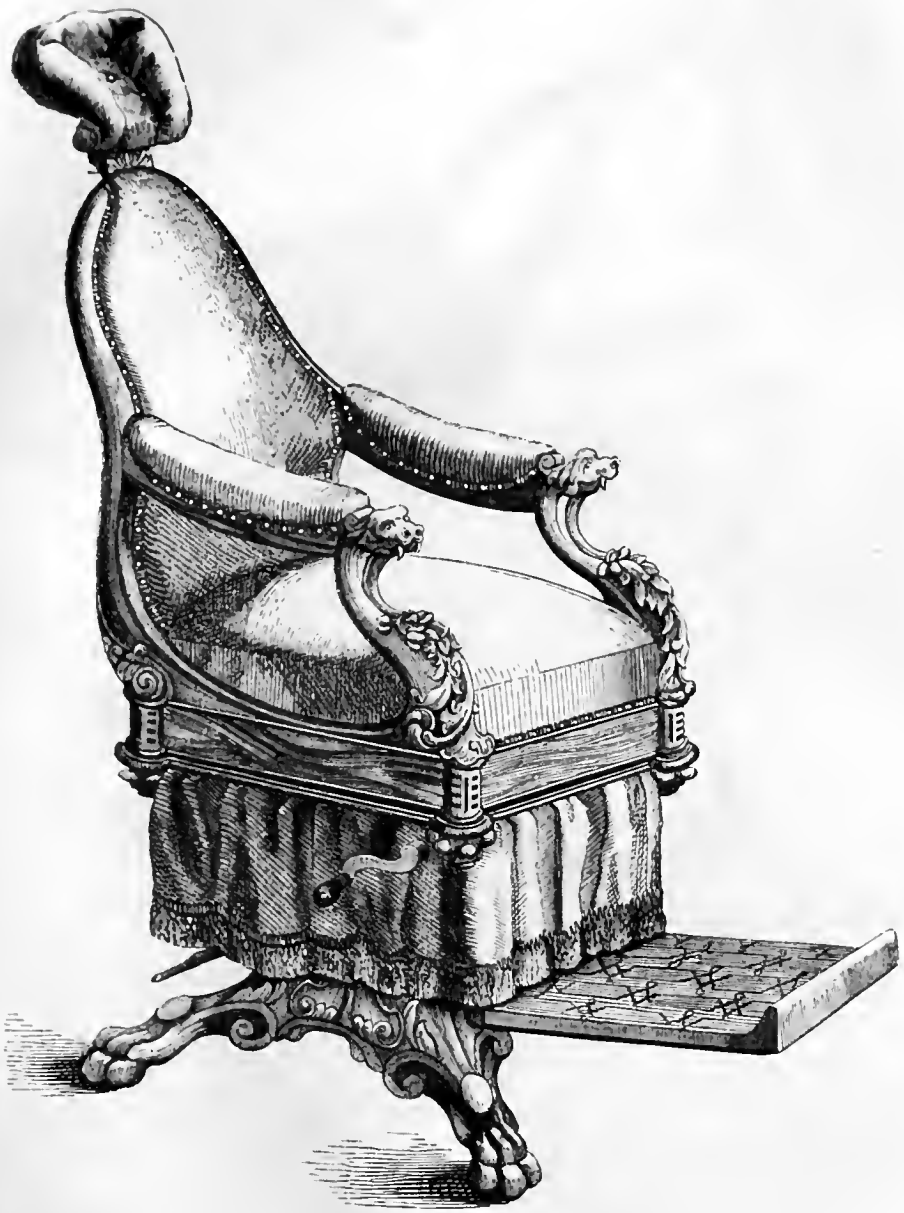
Walnut, Imitation of Rosewood		$160 00
Mahogany		160 00
Rosewood		170 00
Finished with Silver-headed Nails	extra	2 00
Boxing	"	5 00

NOTE.—These are Philadelphia prices, freight and expenses to be added when sold at other Depots.

PERKINS' DENTAL CHAIR.

LATEST PATTERN.

No. 3.



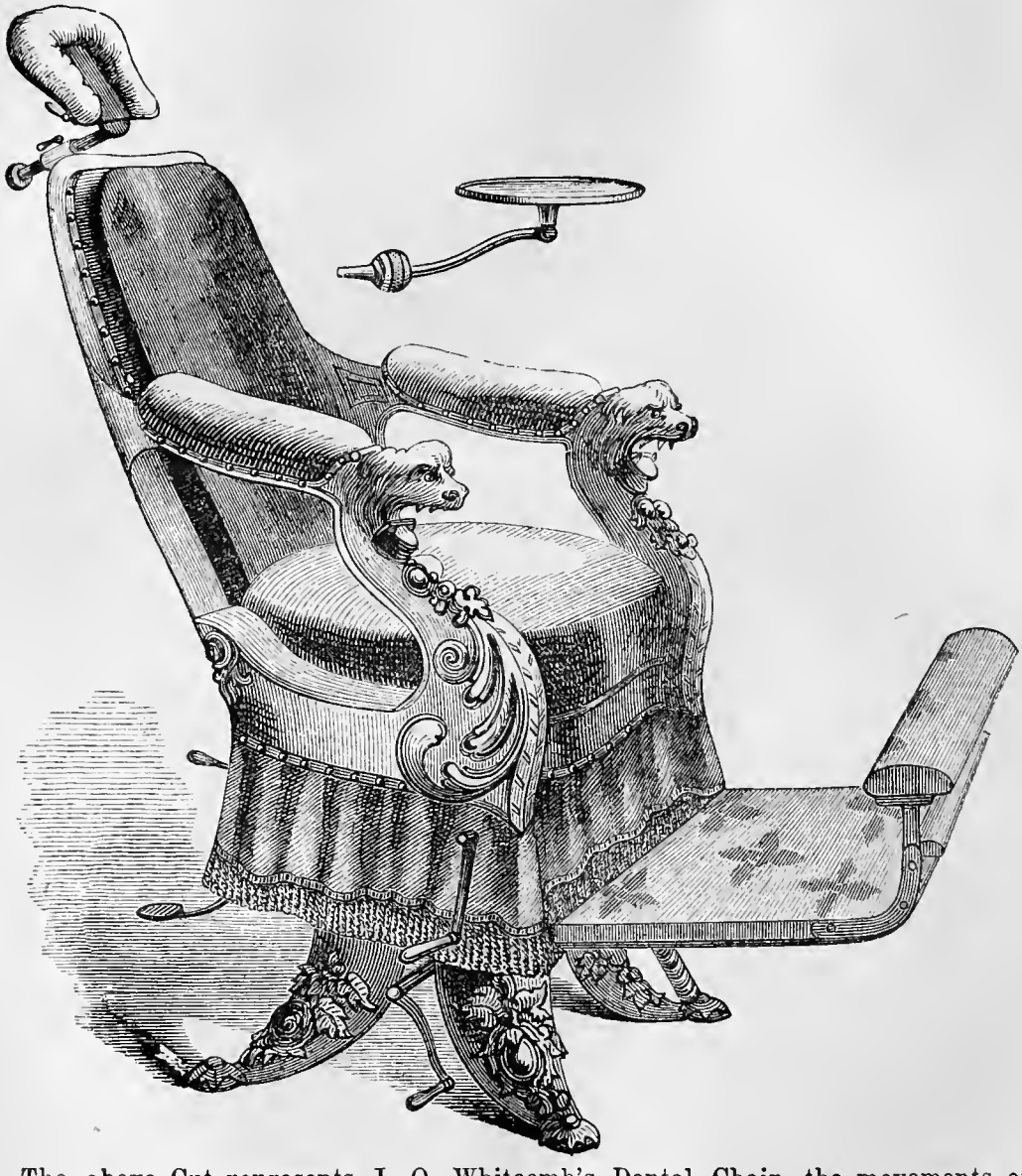
The above Cut exhibits the latest pattern of our Carved Frame Perkins' Patent Dental Chair. For strength, durability, and beauty of finish, these Chairs cannot be excelled. They are made of Oiled Walnut, Rosewood, and Walnut imitation of Rosewood; are upholstered in the best style at the following prices:

Rosewood		$185 00
Oiled Walnut		170 00
Walnut imitation of Rosewood		170 00
With Whitcomb's Head-rest substituted	extra	30 00
Upholstered with Silver-headed Nails	"	2 00
Boxing	"	5 00

NOTE.—These are Philadelphia prices, freight and expenses to be added when sold at other Depots.

J. O. WHITCOMB'S DENTAL OPERATING CHAIR.

No. 4.



The above Cut represents J. O. Whitcomb's Dental Chair, the movements of which may be understood from the description:

The Crank in the Base gives motion to the powerful machinery operating upon four strong Screws, one in each corner, and the whole body of the Chair with the patient in it is easily raised or lowered to suit the convenience of the operator.

Being mounted on a large Ball, the body of the Chair may be reclined backward in any angle to about 60 degrees, and to either side to about 40 degrees; and is securely clamped in any of these positions by the Foot-lever.

The Crank, on the lower part of the back of the Chair, communicates motion

to the Apparatus under the Seat for adjusting the same to any required height, while the patient may be in the Chair, and working so freely in its bearings but little exertion is required. The Seat may be tilted, the front up and the back down, which more effectually prevents sliding forward when the Chair is set vertically.

The Foot-board is elevated or lowered at pleasure by a Crank.

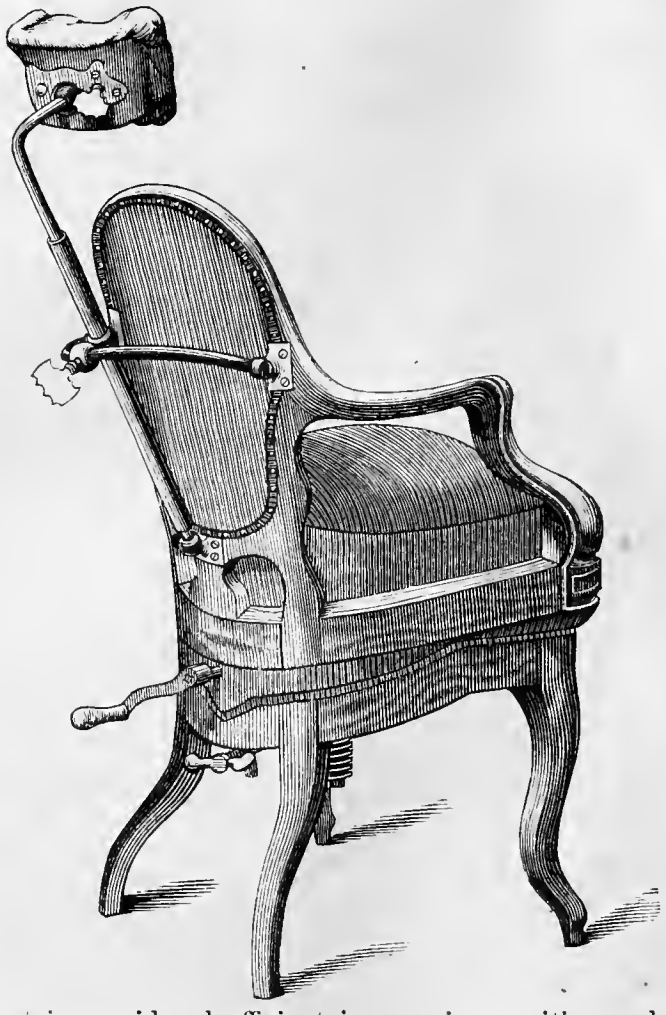
The Head-rest is adjustable up or down by the small Crank on the back of the Chair, and back and forward by the Sliding-bar. It is fixed at any angle by the Miller-head, which operates a Screw working into a segment. It can also be placed on either side of the Chair. There are other movements, combining some dozen in all.

These Chairs are finely finished in different styles, beautifully upholstered in the most durable manner, and all the Cranks, Clamp-screws, and other trimmings Silver-plated, making it as fine a piece of furniture as can be desired. They are mounted on Rollers and are easily moved for sweeping the carpet, etc.

Rosewood	$230 00
Walnut, Oiled or Varnished	210 00
Extra, for small Table	10 00
" " Seat-tilting Apparatus	10 00
" " Silver-headed Nails	2 00
" " Arm-rest	15 00
" " Boxing	5 00

O. C. WHITE'S HEAD-REST.

PATENTED MARCH 12, 1867.



This Head-rest is considered efficient in securing position and support to the patient's back and head in any direction that may practically be required in all dental operations.

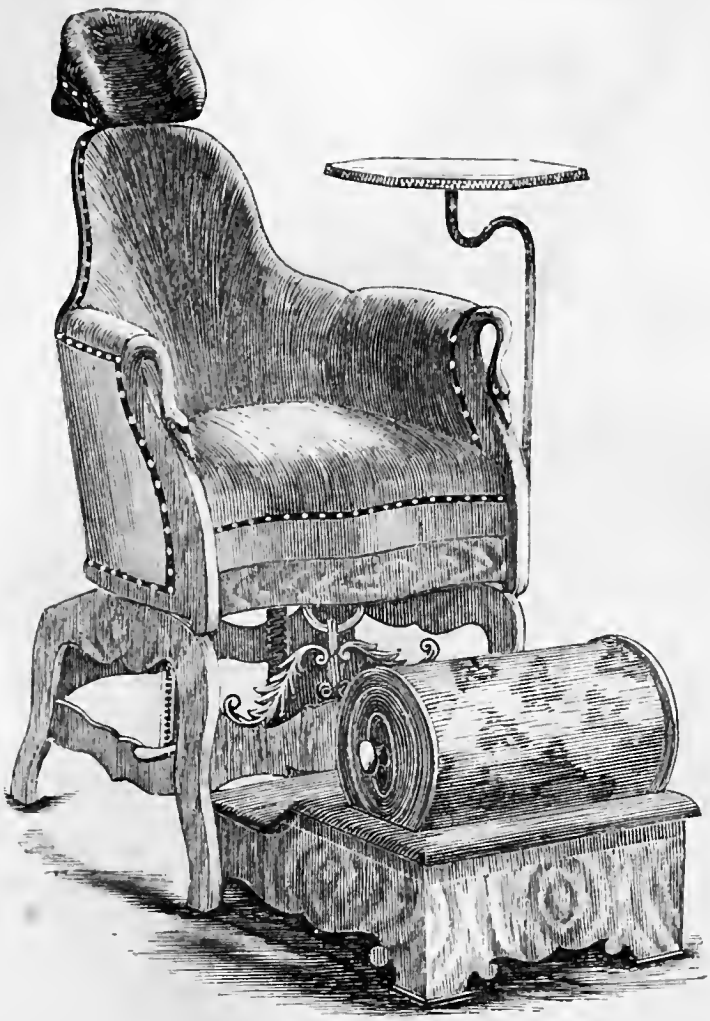
It has long been a desideratum in Clinics to have a wide lateral motion without disturbing the Seat upon which the patient rests. With this form, great side, back, and front, as well as up and down, motion is obtained. It is held in position by a single Thumb-screw, which is evenly turned to hold solid and firm. The principle of its movements is to maintain a relative position and support, parallel with the spinal column, in whatever position the patient may be placed. Thus the Base, a Universal-joint or Ball-and-socket, supporting a Tube in which is a sliding Rod, three-quarters of an inch in diameter, curved at its upper extremity to reach forward over the back of the Chair, terminating with a Head-rest on a Ball-and-socket Joint. The Head-rest, which is secured and clamped by a Screw at the back of the upholstered work, is made in the form of a roll on three sides, to give an easy adjustment to the head or style of dressing the hair. Across the back of the Chair a circular Rod, with bearings at either end, is held in connection with the upright Tube and sliding Rod by a Clasp, which the Thumb-screw controls, firmly securing the position in which the Head-rest may be placed. It has a movement from side to side of thirty inches, back and forward of fifteen inches, and an elevation of eighteen inches. It may be applied to any Chair, but a low back is recommended.

Its greatest advantage may be gained on a Chair made plain and with a view to universality of motion.

Price of Head-rest	$40 00
Applied to No. 1 Chair	125 00

R. W. ARCHER'S IMPROVED DENTAL CHAIR.

JUSTUS ASK'S PATENT.



This Cut represents No. 2 of Archer's make.

No. 1. Black Walnut, upholstered with Enameled Cloth or Reps	$51 00
No. 2. Black Walnut, upholstered with figured Plush	61 00
No. 2. Mahogany " " "	64 00
Plain Plush adds $3 to No. 2.	
No. 3. Black Walnut, carved, upholstered with best Plush	90 00
No. 3. Mahogany, same style and finish	90 00
No. 4. Rosewood, carved, upholstered in the very best manner with best quality Plush. Seat raised by a wheel instead of a crank	125 00
No. 4. Mahogany or Walnut, same style and finish	110 00
Table and Crane for Chair, bronzed. (See Cut.)	5 00
Table and Crane for Chair. The Table with Drawers. Crane Silver-plated	16 00
Finished with Silver-headed Nails, $2 extra.	

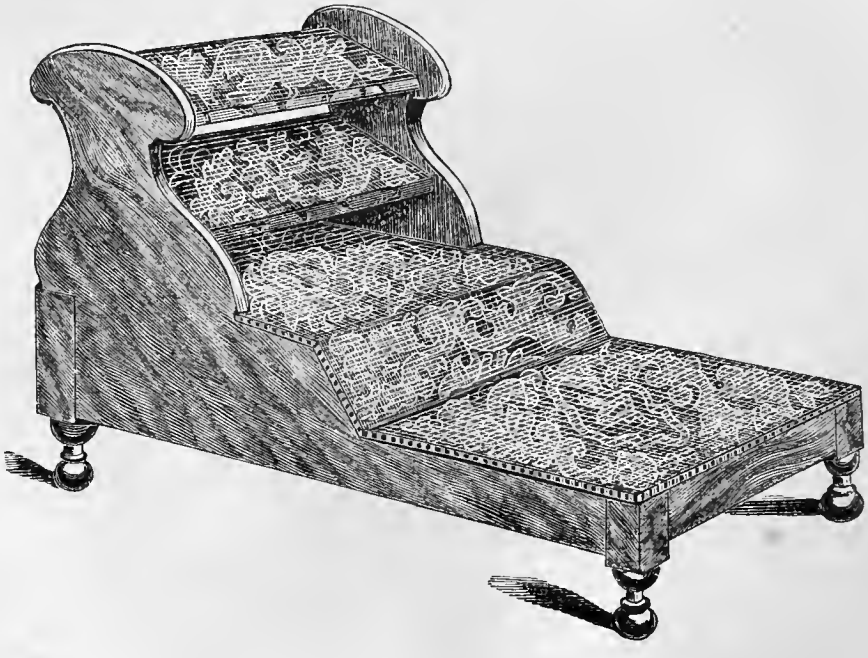
FOOT-STOOLS.

R. W. Archer's Make (see Cut of Chair), as follows:

No. 1. Black Walnut, covered with Ingrain Carpet	$11 00
No. 2. Black Walnut or Mahogany, covered with Brussels Carpet	13 00
No. 3. " " " carved, covered with Velvet Carpet	20 00
No. 4. Rosewood, carved, covered with Velvet Carpet	25 00

Our own Make, a variety of Styles and Prices.

No. 1.

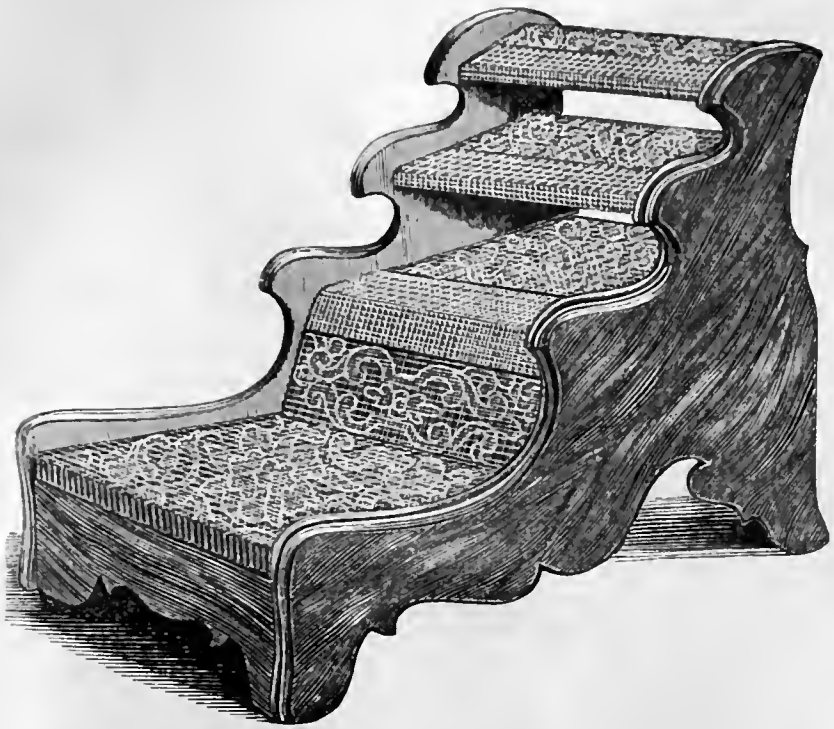


Walnut Oiled, Varnished, Imitation of Rosewood and Mahogany.

DIMENSIONS.—Front, 6½ inches high; back, 20 inches high; width, 18 inches; length, 30 inches—outside measurement.

Covered with Brussels Carpet	$12 50
Without Carpet	9 00

No. 2.



Walnut Oiled, Varnished, and Imitation of Rosewood.

DIMENSIONS.—Front, 6½ inches high; back, 25 inches high; width, 19 inches; length, 30 inches—outside measurement.

Covered with Brussels Carpet, with figured Brass Foot Strips to protect the Carpet	$16 50
Carpeted, without Brass Strips	13 50
Plain, without Carpet or Brass Strips	10 00

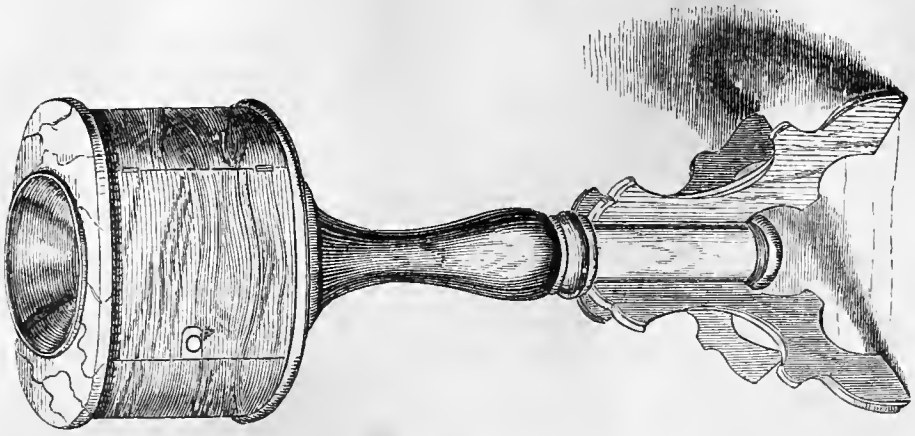
WHITCOMB'S DENTAL "FOUNTAIN SPITTOON."

This "Fountain Spittoon" consists of a hollow iron Column, beautifully enameled in imitation of Rosewood, and at the bottom is fastened to the floor with screws. There are two leaden Pipes, the smaller for supplying the Spittoon with water, and the larger one for waste, as shown by the arrows. At the top of the Column the hollow Arm is attached by a water-tight joint turning freely around thereon; the

other end of the hollow Arm supports the Bowl or Basin. The Supply-pipe connects through an inner water-tight joint with the upright Pipe, rising from about the middle of the hollow Arm supporting the small Goblets, and is surmounted by a Swan, furnishing drinking water when turned over the Basin. Around the inner edge of the Basin a Pipe with numerous small jets connected with the upright Pipe continually rinses it, the water passing off through the hollow Arm and through a passage around and entirely independent of the Supply-joint, and thence to the Waste-pipe. On the under side of the hollow Arm, near the Column, a small Receiver collects all substances of a greater specific gravity than water, such as Gold and other valuable fillings. On the side of the iron Column a Socket is fixed, supporting the Crane and Instrument Table. All the parts, except the iron Column and Table, are either Silver-plated or Bronzed; and altogether it is a very novel and convenient piece of dental furniture.

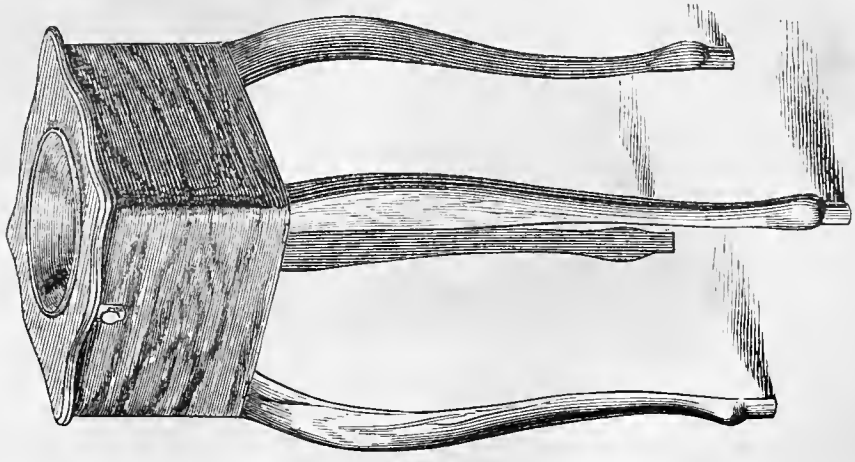
Silver-plated Spittoon, without Crane and Table . . .	$65 00
Bronzed " " " . . .	55 00
Silver-plated Extension Crane, Oct. Walnut Table with Drawers	35 00
" " Round " without "	18 00
Japanned " Oct. " with "	30 00
" " Round " without "	13 00
Silver-plated Spittoon, with Revolving Washer, without Crane and Table	85 00

SPITTOON-STANDS.



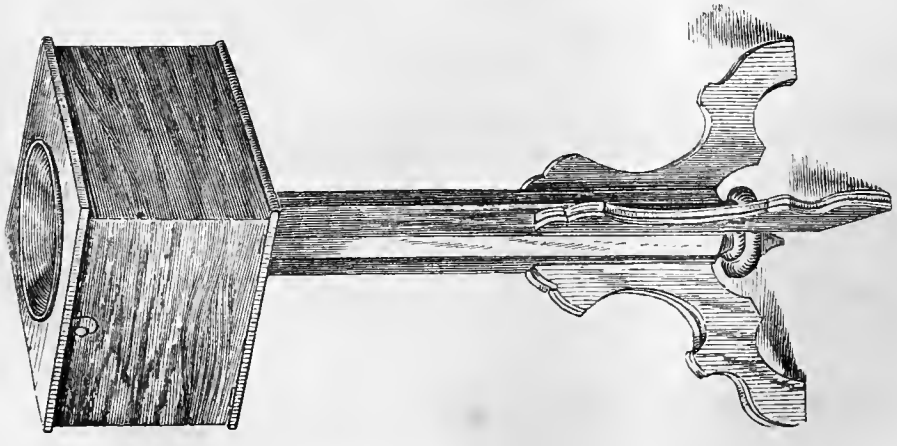
No. 3.

Rosewood, White Marble.	$25 00
Walnut, White Marble	25 00



No. 2.

Imitation Rosewood, without Marble.	$14 00
Walnut, without Marble.	14 00



No. 1.

Imitation Rosewood, without Marble.	$9 00

Marbles in accordance with prices on page 129.

Our stock and variety in this line are extensive. Only the principal styles are illustrated. The prices range from $9 to $40 each.

Boxing extra, $1 50.

No. 4.

Carved Oiled Walnut, White Marble,	$38 00
" " " Tennessee "	40 00
Boxing, extra	1 50

MARBLE TOPS FOR SPITTOON-STANDS.

White Italian, Square and Oval	each	5 00
Tennessee, " "	"	10 00
Lisbon, " "	"	11 00
Mosaic, " "	"	12 50

IMITATION MARBLE TOPS FOR SPITTOON-STANDS.

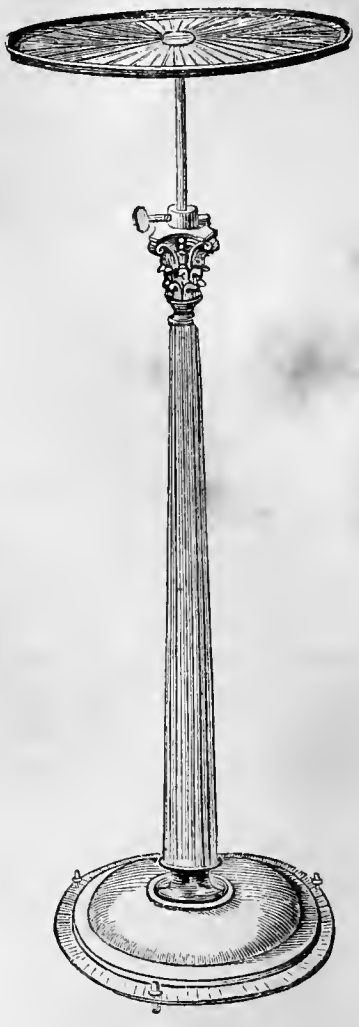
Enameled Slate.

Spanish (red), Square and Oval	each	5 00
Verde-Antique (green), Square and Oval	"	5 00
Brocatelle (yellow), " "	"	5 00

DENTISTS' STAND OR TABLE.

A NEW DESIGN OF OUR OWN MANUFACTURE.

No. 1.



No. 2.

The above Cuts are designed to represent a very convenient and beautiful piece of furniture for the Operating-room.

The Jointed Bracket, to fasten to the wall or wood-work of the room, or attached to the Operating-chair, has long been in use to bring such instruments as are required for immediate use within the reach of the Operator. In some Offices, the Bracket cannot be adjusted to advantage. This Table is designed to meet the views of those who do not use the Bracket, or who are not fully satisfied with it.

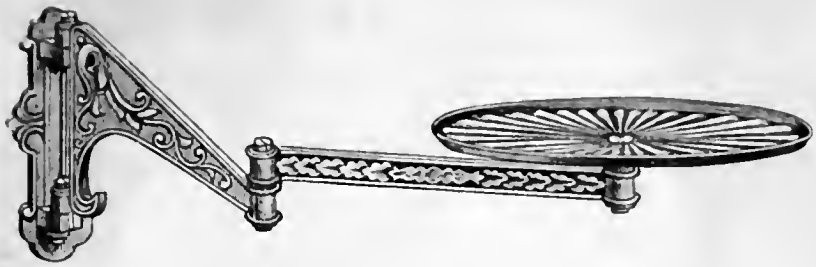
The Base and Column of No. 1 are Fine Gilt and Bronzed Castings, equal in appearance to the best French Bronzes. The Stand is 32 inches high, and mounted on casters. The Tray is made of Sheet-brass, 13 inches in diameter, with a stationary rim $\frac{3}{4}$ inch high, and revolves upon its support. It is capable of an elevation of 20 inches, and is retained at any point by a Set-screw at the top of the Column.

No. 2 is a Plain pattern, without Gilt Castings, but of the same size and description as the No. 1. No. 1 weighs 24 pounds; No. 2 weighs 16 pounds. They are easily moved by the foot or hand, and, owing to the weight of the castings, not liable to be overturned. Dentists, who have similar Stands in use, recommend them in the highest terms. Manufacturing these in large quantities, we are enabled to sell them at the following reduced prices:

No. 1	$27 00
No. 2	15 00

EXTENSION BRACKETS.

S. S. WHITE'S BRACKET.



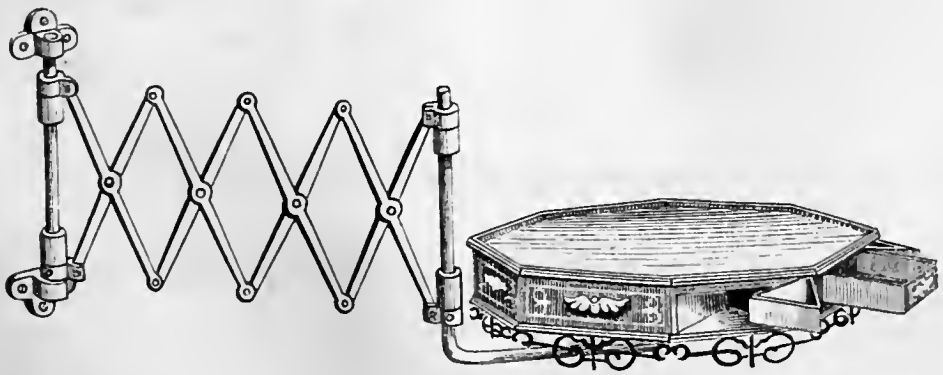
The Engraving represents a Bronzed Iron Extension Bracket, 2 Joints, with Brass Trimmings, beautiful and substantial. The Tray is made of Sheet-brass, strengthened with Ribs underneath. Length extended, 31 inches to centre of Tray $20 00

This Bracket has less vibration than the Three-joint, and is therefore generally preferred.

Also a very handsome Two-joint Bracket, style of the above, of real Bronze, Engraved, and Etched all over, Nuts and Washers Electro-gilded; fitted with great care, and finished equal to the best French Bronzes. With Tray, as described above, with Velvet Pad . . . 50 00

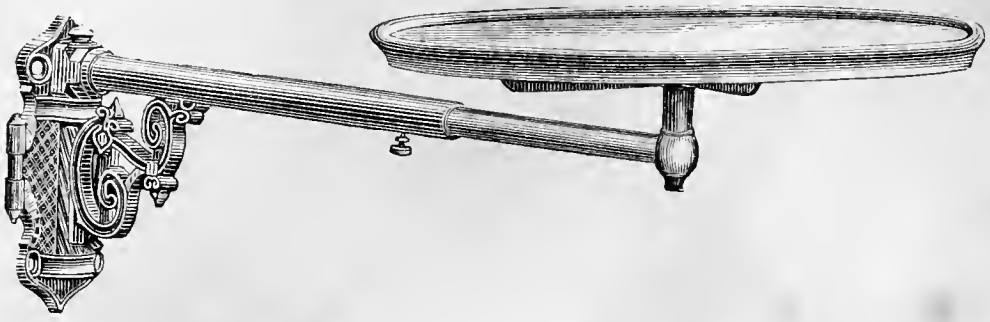
The material and workmanship on these Brackets are of the best quality. Each Joint moves upon a Steel taper Pin, and may be tightened as it wears loose, and so kept tight for years.

BRACKET No. 2.



No. 1. Rod sliding in a Tube, Japanned, without Table	$10 00
No. 1. " " Silver Plated "	15 00
No. 2. (as per Cut) Japanned, without Table	15 00
No. 2. " Silver Plated "	35 00
Octagon Tables (as per Cut) with Drawers	20 00
Plain Round Tables	3 00

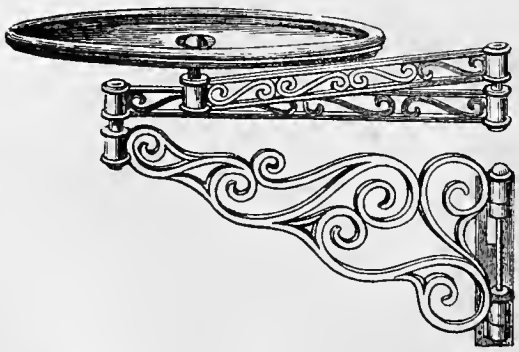
ROD AND TUBE BRACKET.



Made of Cast-iron, Bronzed or Silver Plated. The extension is effected by two pieces of pipe sliding one into the other. Length extended, 36 inches.

The Table is Black Walnut, Velvet lined, and fourteen inches in diameter.

Bronzed, including Table	$12 00
Silver Plated "	15 00
Bracket, without Table, less	2 00



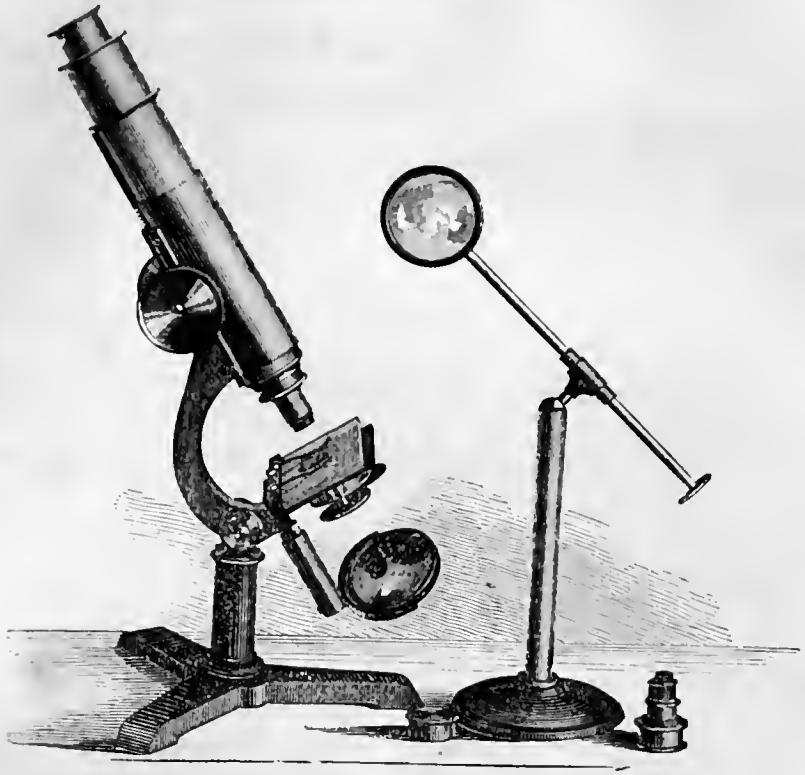
The Engraving represents a Cast-iron Extension Bracket, with three Joints or Arms, measuring 16 inches each in length. Being jointed, it can be placed in any direction or distance at the will of the Operator. Each Joint moves upon a Steel taper Pin, and may be tightened as it wears loose, and so kept tight for years. The Tray is made of Sheet-brass, strengthened by Ribs underneath, 12½ inches in diameter, with a stationary Rim. Length extended, 45 in. $12 00

CUPS FOR EXCAVATORS, PLUGGERS, ETC.

These Cups are designed to be attached to an Extension Bracket or Table, for holding Excavators, Pluggers, etc. They are secured by means of the Ring illustrated. Made of well-seasoned Black Walnut, and highly polished.

Excavator Cup	$0 50
Japanned Ring	10

THE DENTIST'S MICROSCOPE.

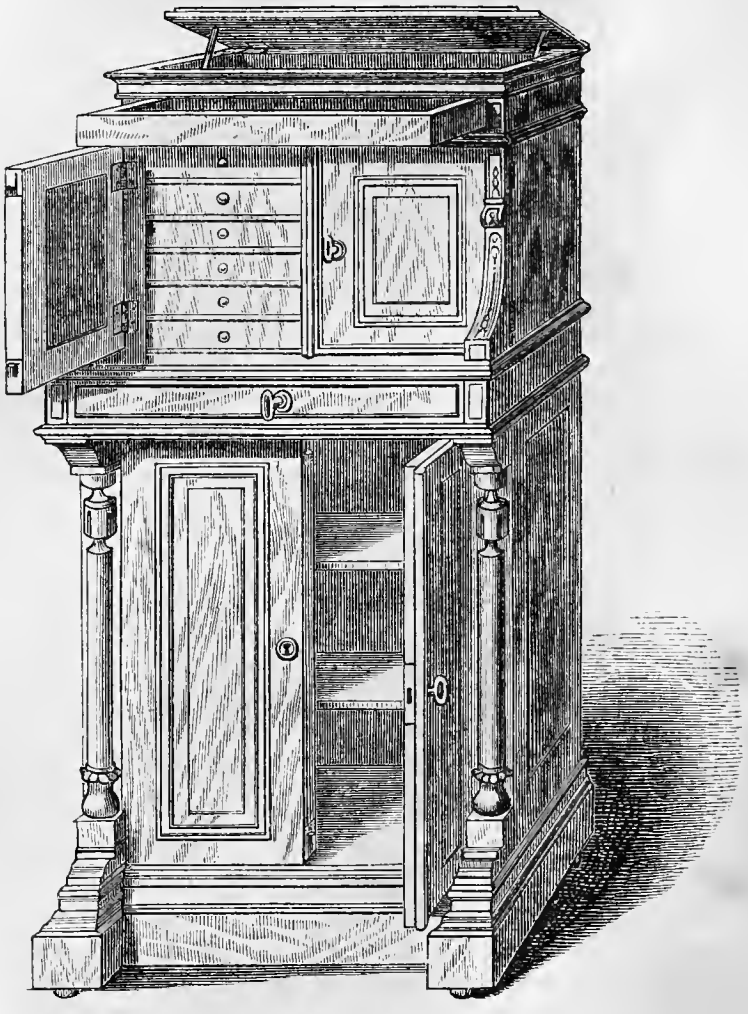


The Dentist's Microscope consists of a firm Cast-iron, lacquered Tripod Stand, upon which rests the Body and Stage, by means of a Trunnion Joint, so that the Instrument can be placed at any convenient angle for use. The focus is obtained by means of a Coarse Adjustment, consisting of a Rack and Pinion attached to the Body, and a fine Screw with a milled head affixed to the Stage, which is of glass, and furnished with all the motions in every direction. It also has Spring Dips to hold the object, as well as a Ledge for it to rest against. One Eye-piece and two Objectives are supplied with the Instrument, giving respectively a magnifying power of 125 diameters, or 15,425 times superficial, and 230 diameters, or 52,900 diameters superficial, being amply sufficient for all purposes. Two Mirrors, a Plane and a Concave one, having all the motions; a Revolvable and Removable Diaphragm, as well as a Condensing Lens on a separate Stand, with joints so arranged that it can be placed in any position, are also attached, and the whole fits into a French-polished Mahogany Case, so provided with divisions as to hold all the several parts in place, that it may travel perfectly safe.

These Instruments were designed for Dentists' use by one of the best Microscopists of this country, and are manufactured under his supervision, and are accompanied by a very full and complete pamphlet descriptive of the methods of using them $60 00

DENTIST'S CABINET.

No. 1.



We give above an illustration of a Dentist's Cabinet. It is made *entirely* of Walnut, and finished throughout in the best manner. Dimensions as follows:

Height of Case, independent of Rollers, 52 inches.

Width, inside of moulding, 24 inches.

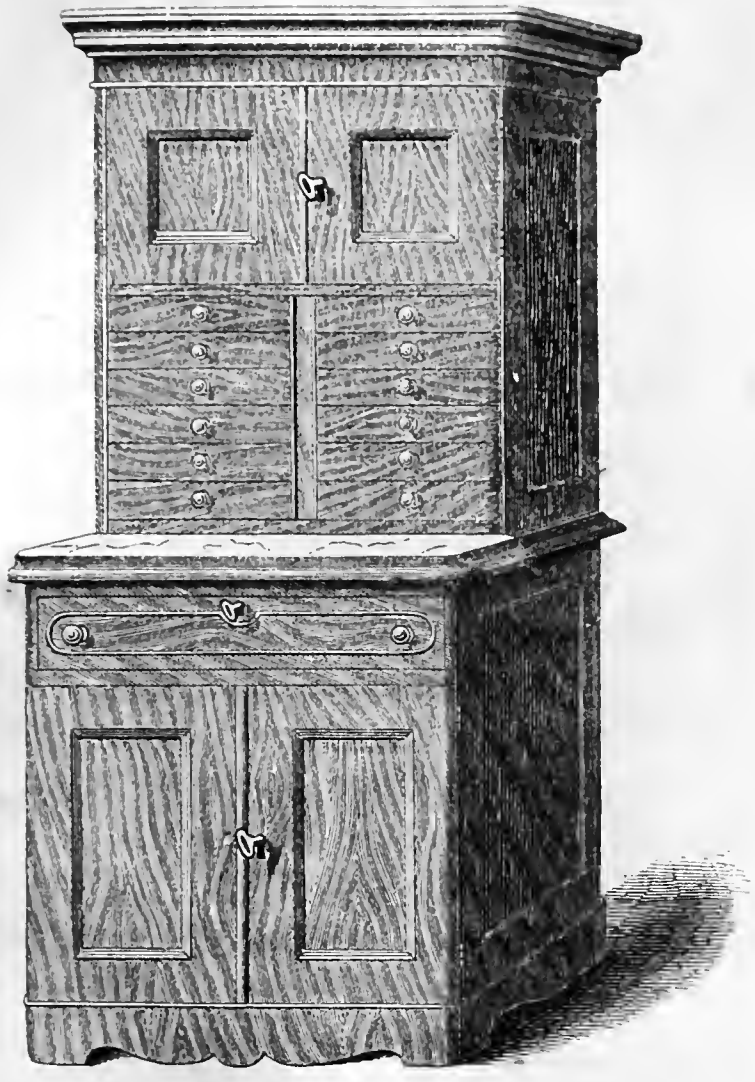
Depth, inside of moulding, 12 inches.

The top Drawer (which has a secret fastening) is 24½ inches long, 11 inches wide, and 2 inches deep (outside measurement). The twelve small Drawers are uniform in size, being 11½ inches long, 10 inches wide, and 2 inches deep (outside measurement). The large or bottom Drawer occupies the full depth of the Cabinet; it is 24½ inches long, 14 inches wide, and 2½ inches deep (outside measurement). The Closet is 26 inches high, 25 inches wide, and 10½ inches deep (inside measurement). $100 00

Boxing extra.

DENTIST'S CABINET.

No. 2.



This Cabinet is made of Walnut, Oiled, and finished in the best manner.

Outside measurement of entire Case as follows: height, 62 inches; width, 26 inches; depth of lower half, 17 inches; depth of upper half, 12 inches. With White Marble Table-top.

Large Drawer, 24 inches long, 15½ inches wide, 4½ inches deep (outside measurement); this Drawer has a sliding Shelf in the form of a Tray, hiding Forceps, etc. from view, and answering instead of a table when the Drawer is pulled out. Ten of the small Drawers measure 11¾ inches long, 11¼ inches wide, 1½ inch deep. The two bottom small Drawers, same length and width, 3 inches deep (outside measure-

ment). These twelve Drawers are locked by a single movement of a Bolt inside the top Closet. Dimensions of top Closet, 24 inches wide, 12½ inches high, 11¼ inches deep (inside measurement). The bottom Closet, 24 inches wide, 20 inches high, 15 inches deep (inside measurement). Top of Cabinet hinged on similar to No. 1 . . . . . $75 00

Drawers lined with Silk Finish Cotton Velvet 90 00

A similar Cabinet, Walnut, Varnished, of R. W. Archer's manufacture, No. 2 50 00

Drawers lined with Silk Finish Cotton Velvet 65 00

R. W. Archer's New Cabinet, No. 3, Oil Finished 60 00

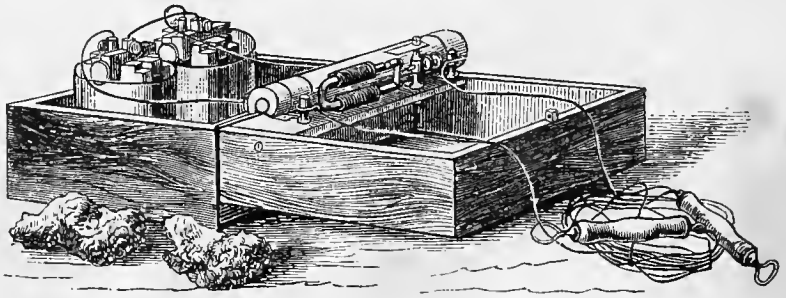
Drawers lined with Silk Finish Cotton Velvet 75 00

R. W. Archer's No. 5 Cabinet, Oil Finished 85 00

Drawers lined with Silk Finish Cotton Velvet 100 00

THE FIFTY-DROP GALVANIC BATTERY.

INVENTED BY DR. S. B. SMITH.



The superiority claimed for this Instrument over others, by the inventor, is that it has a direct current, and the Zincs never require cleaning.

Complete $20 00

ARKANSAS STONES.

A SUPERIOR ARTICLE.

A large assortment of all sizes and descriptions, selected and cut expressly for our sales.

Knife-edge Slips, for finishing fillings $0 75

Pointed Slips " " " 62

Square Lengths . . . . . 50 to 1 00

Small Flat Oblong Pieces, for sharpening Instruments . . 25 to 1 00

The same, in Walnut Boxes, very convenient 80

Large Flat Oblong Pieces, for sharpening Instruments . . 1 00 to 5 00

APPARATUS

FOR

PRODUCING LOCAL ANÆSTHESIA

BY NARCOTIC SPRAY.

APPLICABLE TO GENERAL AND DENTAL SURGERY.

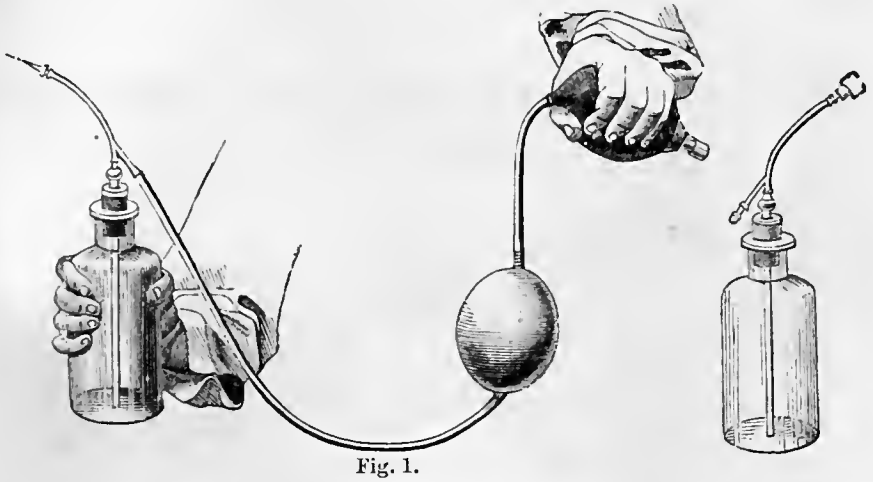


Fig. 1.

The Apparatus consists of a Bottle to contain the Ether or other fluid to be used; through a perforated cork a double Tube is passed, one extremity of the inner part of which goes to the bottom of the Bottle; above the cork a Tube, connected with the Bellows, pierces the outer part of the double Tube, and communicates by a small aperture at the inner end of the cork with the interior of the Bottle. The inner Tube for delivering the Ether runs upward to the extremity of the outer Tube.

When the Bellows are worked a *double current of air is produced;* one current descending and pressing upon the Ether, forcing it along the inner Tube, and the other ascending through the outer Tube and playing upon the column of Ether as it passes from the inner Tube.

Put the Ether into the Bottle, nearly filling it, then insert the Tube with the cork firmly, and fit the Nozzle to give the jet desired; the Bulb on the extremity of the rubber tubing being now grasped in the hand and rapidly used as a Hand-bellows—

the other Bulb acting as a reservoir—keeps up a steady pressure upon the Ether and produces a continuous jet.

The small wires, called Stylets, are used to graduate the Spray, which is made finer or heavier by the use of the different sizes.

Remove the Nozzle and insert the Stylet in the small Tube. The hook on one end of the wires is to prevent their slipping into the Tube.

Two Nozzles accompany the Instrument; the straight one for producing a single jet, and the double curved one for operating on both sides of a molar tooth.

No more Spray should be thrown on the part to be affected than will evaporate instantly. Therefore, adjust the Regulator at the end of the liquid-bearing Tube carefully to furnish as much liquid as will be thoroughly atomized, and no more.

The ordinary Ether of the shops will not answer for producing local anæsthesia, nor should the *concentrated* be used for producing general anæsthesia by inhalation.

Should the Tubes become clogged, they can be freed by applying the mouth to the larger end and sucking, or by the use of the fine wire which accompanies the Instrument. Take a short hold of the wire with a pair of pliers and force it gently through the Tube. If the point of the Tube becomes obstructed by ice, it may be cleared quickly by touching it with the tongue.

If the bulb of a thermometer be placed in the Spray, the mercury should be brought six degrees below zero in thirty seconds, and snow should form on the bulb of the thermometer. Water in a $\frac{1}{4}$ inch test-tube held in the Spray should be frozen within two minutes, and when the Spray is directed on the back of the hand, the skin should be rendered insensible to a pinch, and should suddenly blanch in the same period of time, or even in one minute.

Hold the atomizing end of the Tubes from three-quarters of an inch to one and a half inches from the part to be frozen, in such a position that the Spray will be thrown squarely upon it, and operate the Bellows-bulb (the end one) briskly until the part is white, when it will be insensible. This will be in a few seconds with Rhigolene, and in about one minute with concentrated Sulphuric Ether.

In operating for teeth extraction, most Operators throw the Spray first on the gum and then upon the tooth and gum. Others cover the gum and other teeth with a non-conductor and throw the Spray directly upon the tooth to be removed, taking the precaution to cover the nerve, if exposed, with wax or cotton. By

this method some pain will be experienced during the first seconds of application, but it will speedily pass away, and when the gum becomes white, which should be in from ten to fifteen seconds after the first application of the Spray, the tooth may be removed.

For operations on the teeth use the double jet, directing the Spray on each side of the gum, and deeply. In the lower jaw it is advisable to place a little cotton wool between the cheek and the gum, and beneath the tongue and the gum, so as to absorb the Ether.

When lower molars are to be extracted, it is better and often necessary, to close the salivary ducts to prevent interference of a too copious flow of saliva.

For painless removal of dental pulp, the exposed nerve should be covered with a non-conductor and the Spray directed as for extraction.

For minor surgical operations, after the first incision simply through the skin, when it has been rendered insensible, the Spray may be directed into the wound, when a much deeper anæsthesia will be produced. The Spray may be directed for any length of time that may be required for any operation.

Apparatus of German Silver, Silver Plated, with two Nozzles of Coin Silver	$10 00
With Foot-bellows Attachment	14 50
The same Apparatus, with brass Tubes and Nozzles, Silver Plated, complete, ...	7 00
With Foot-bellows Attachment	11 50

The Apparatus (*Fig.* 2) as improved by Dr. James E. Welch (see article by Dr. Welch in January number of the DENTAL COSMOS, 1867), with Silver-plated Lip and Cheek Holder attached, enabling the operator to dispense with the assistance of another person,—has three Nozzles. 8 oz. Cut Glass Bottle.

Complete	$12 00
With Foot-bellows Attachment . .	16 50

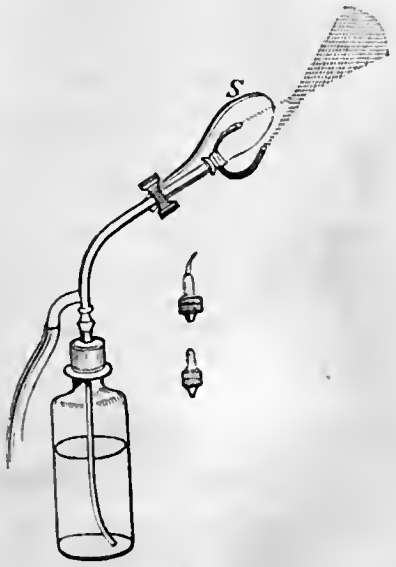


Fig. 2.

A neat and efficient Foot-bellows as shown in Fig. 3. The Reservoir is provided with a Stop-cock by which the pressure of air may be stopped or continued at pleasure.

Bellows, Reservoir, 6 feet Tubing and Stop-cock, applicable to any Spray Apparatus . . . $7 50

Fig. 3.

In addition to the preceding, a less expensive Instrument is offered, with but one permanent Bifurcated Nozzle, as illustrated by Cut No. 4. The Tube is of German Silver, Silver Plated. Bulbs of the best quality.

Complete $6 00

Fig. 4.

Complaints have been made that some of the Instruments in the market purporting to be Richardson's do not perform well. This is believed to be due to a want of sufficient care in manufacturing and regulating them. Every Instrument manufactured by us is carefully tested before it is offered for sale.

These Instruments are used successfully for painless extraction of teeth, removal of dental pulp, diminishing sensibility of dentine while excavating, and for small surgical operations on the hands, feet, etc.

THE VARIOUS APPARATUSES MANUFACTURED BY CODMAN & SHURTLEFF.

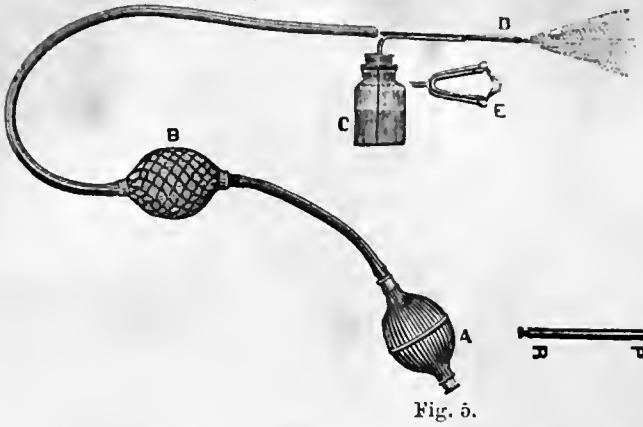


Fig. 5.

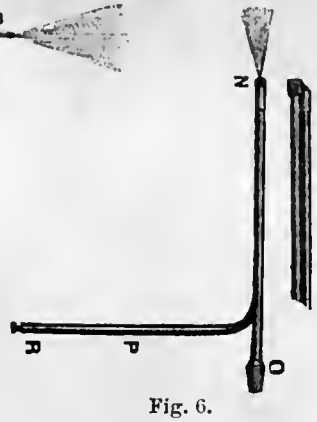


Fig. 6.

Fig. 5 represents Tube for use for teeth of either jaw.

This form is curved upward for superior teeth.

W and Z. The Bifurcated portion of the Tube, designed to deliver Spray on both sides of the gum at the same moment.

X and A. Conical end of air Tube over which the rubber Tube of Bulbs is passed when used.

Y and B. Regulator to control the amount of liquid.

This form is curved downward for inferior teeth.

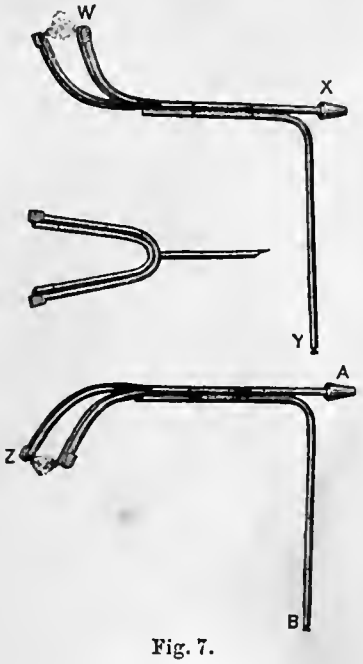
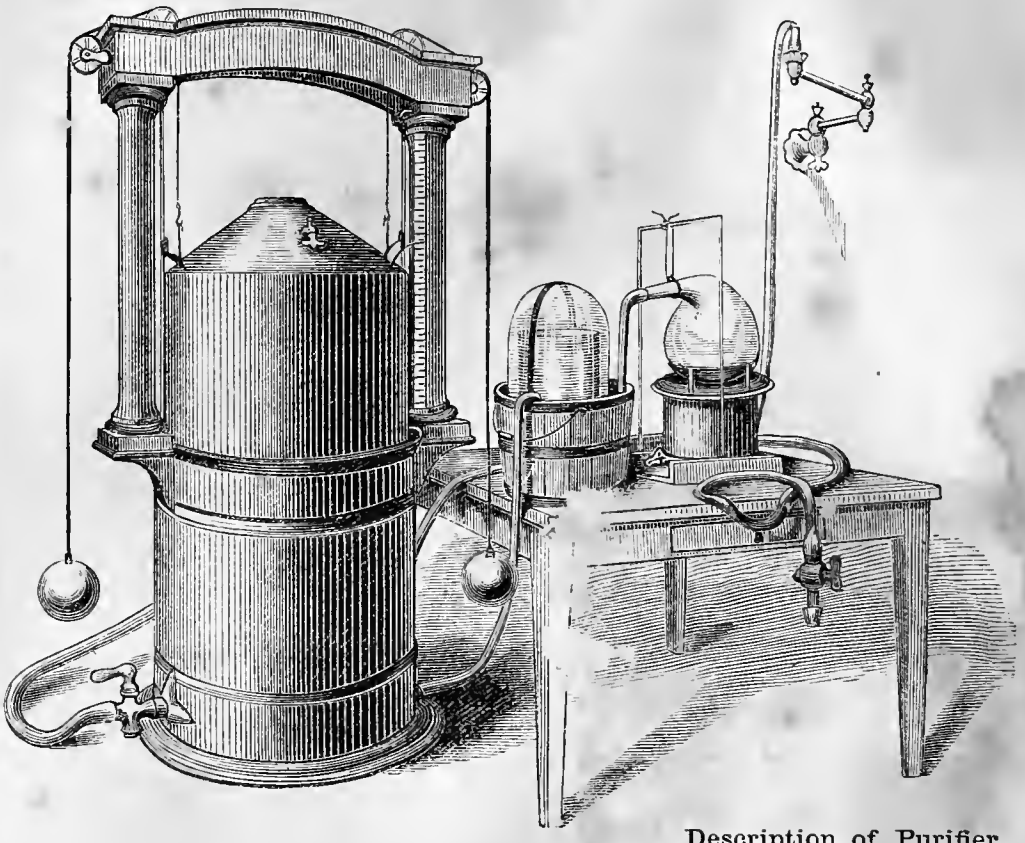


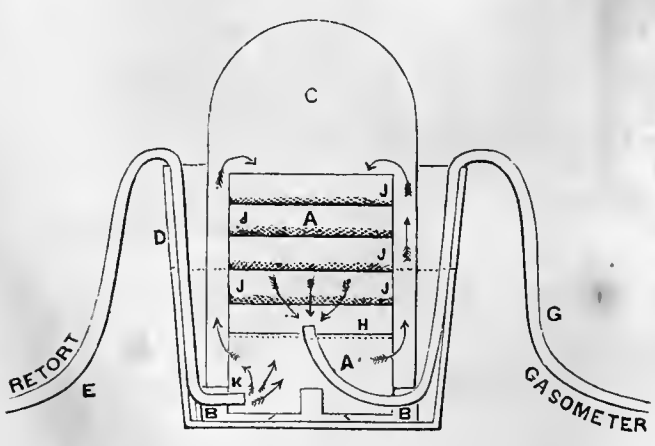
Fig. 7.

Apparatus with one Bifurcated double jet Tube as represented, Fig. 5 .	$6 00
With the two curved double jet Tubes instead of the straight, " 7 .	9 00
Double jet Tube	3 00
Apparatus with single jet Tubes, for use of Surgeons, Fig. 6 . . .	5 00
Single jet Tube	2 00
Rhigolene, in 12 oz. bottles	1 00
" 6 bottles	5 00
Concentrated Sulphuric Ether, warranted perfectly pure, in pound bottles .	2 00

NITROUS OXIDE GAS APPARATUS.

J. B. BEAN'S DESIGN.





Description of Purifier.

A is a Copper Cylinder, divided into two chambers by a Disk H, two-thirds of the distance from the top. The Disk is securely fixed in its place and is gas-tight. The Cylinder is pierced just below the Disk by a number of small holes. B is a wood Stand on which the Cylinder firmly sets. C, a glass Vase covering the Cylinder. K, a short Pipe, to which the conducting Tube is attached, curving under the Vase, and passing into the lower chamber and connecting with the Retort by a rubber Tube E. A similar pipe communicates with the upper chamber, and is connected with the Gasometer by Tube G. The Cylinder is loosely fitted with four Wire-cloth Disks J, placed equidistant, on which is spread Lime. The whole Apparatus sets in a vessel D (a common water-pail will answer), which should be about half full of water.

The Gas passes from the Retort by Tube E into the lower chamber, is partly washed by the water, passes out at the small holes into the inside of the Vase, up into the top of the Cylinder, down through the Lime into the Pipe A, and to the Gasometer by Tube G, as indicated by the arrows.

Apparatus complete, capacity 50 gallons $80 00
Boxing, additional.

NITROUS OXIDE GAS APPARATUS.

MANUFACTURED FOR S. S. WHITE.

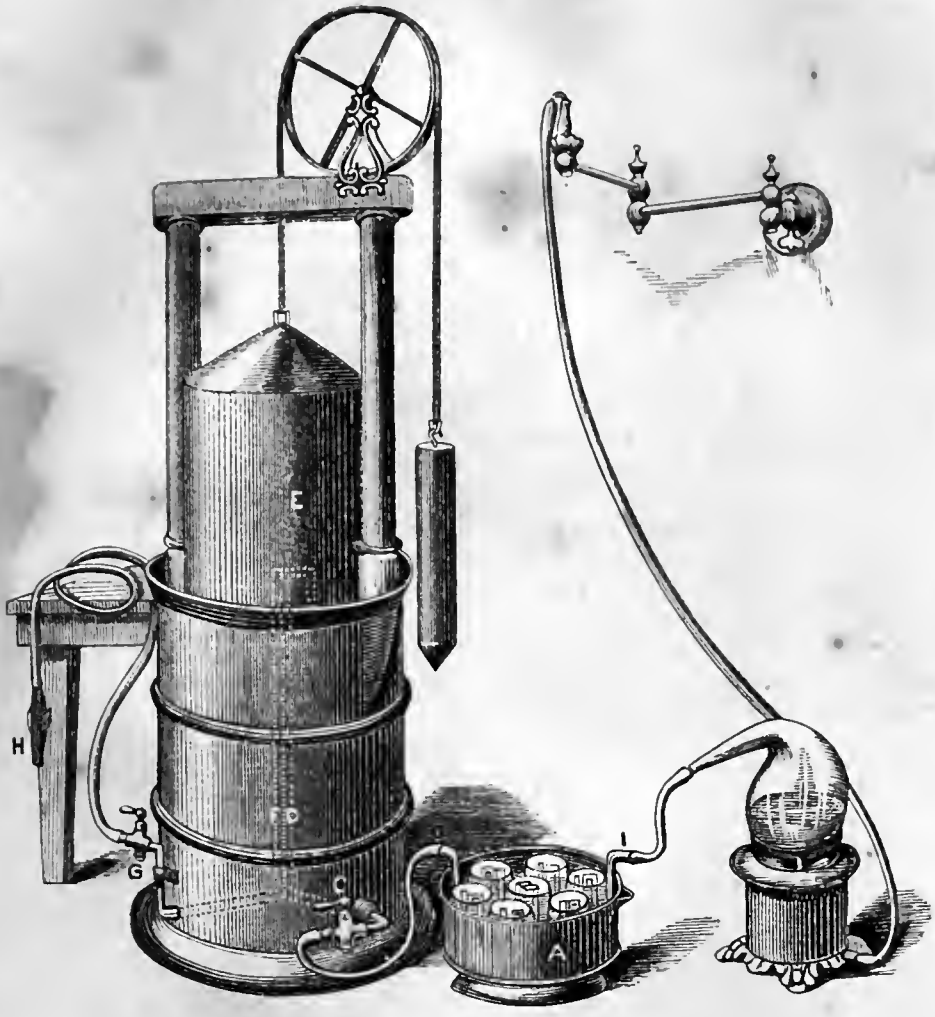


Fig. 2.

Fig. 3.

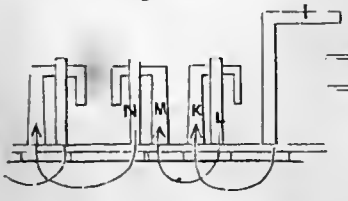


Fig. 4.

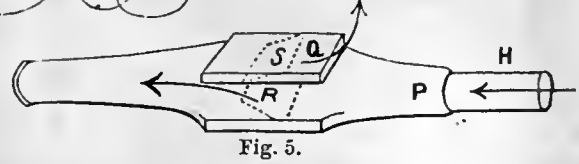


Fig. 5.

The Cut represents a full view of a complete Nitrous Oxide Gas Apparatus, with Retort, Purifier, and Inhaler. Capacity 40 gallons.

The Purifier A contains 7 inverted glass Tumblers B, which stand upon a per-

forated metal Plate, placed about midway in the vessel. On this Plate, Tubes K, L, M, N are soldered, so that two of them are under each Tumbler.

The Purifier is filled with the required solution a little above the opening of the Tubes K, M. The Gas from the Retort entering Tube I, passes through Tube K, into the water contained under the first Tumbler; rising to the top of the Tumbler, it passes into the Tube L, from thence consecutively under the other 6 Tumblers, being washed 7 times. Thence entering by connecting Tube O, through Pipe D (which is provided with a Stop-cock C), it passes into the Holder through the Lime-water with which it is filled, and thence into the Receiver E. The Gas is now ready for use, and when Stop-cock G is opened, is drawn from the Holder through the Tube F. On the top of the Apparatus is placed a large Wheel, over which passes the Strap that holds the Balance-weight. The introduction of the Gas causes the Receiver to rise, and, when the Gas is used, to fall, the pressure being uniform. The Inhaler or Mouth-piece H (see Figs. 4 and 5) is so constructed that the weakest lungs can inhale or exhale through it without difficulty. Its mechanical construction is so simple and strong, that it does not easily get out of order. P is the inlet end which is connected with the Conducting Tube. By taking the opposite end in the mouth and inhaling the Gas, it opens Valve R, and closes Valve S, and in exhaling it shuts Valve R, and passes out of Valve S. These Valves are well protected, the upper one by a Cover Q, the other by being inclosed within the Inhaler. The size of the Gum Valves are such that the strongest lungs as well as the weakest appreciate no interference more than in ordinary respiration. The Apparatus is made in a substantial manner. The process of manufacturing the Gas is simple and expeditious.

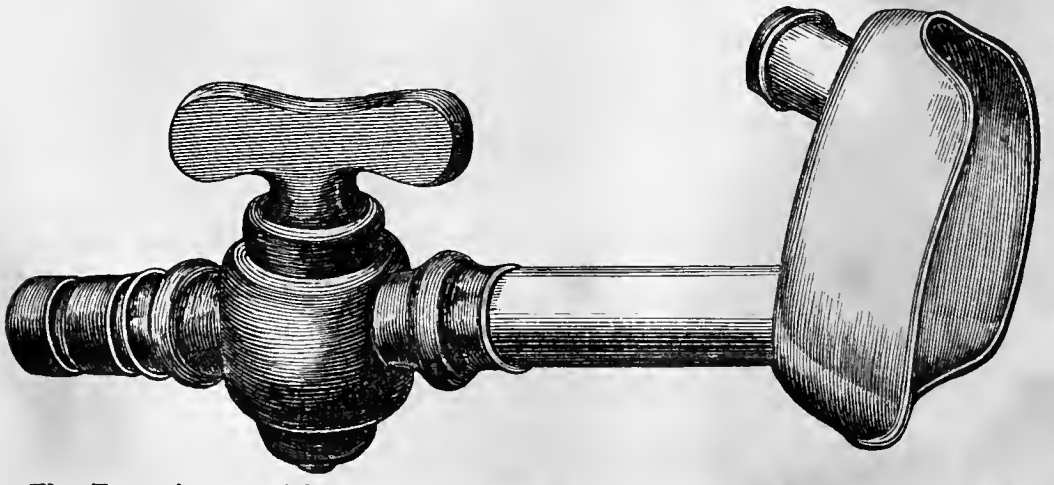
Complete Apparatus, 40 gallons capacity	$70 00
" " 50 " "	75 00

Boxing, additional.

Nitrous Oxide Apparatus of other Manufacturers, of varying capacity, quality, and price, will be supplied to order.

NITROUS OXIDE GAS INHALER.

OUR OWN DESIGN.



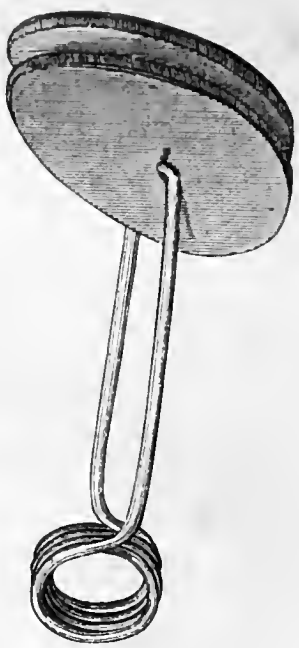
The Face-piece, which is designed to cover both mouth and nostrils, is made of Metal, Silver Plated; the Stop-cock is of Hard Rubber. Two Valves—one for inhaling and the other for exhaling—are affixed to the bottom of the Mouth-piece, sufficiently large to allow natural respiration. Entire length of the Instrument nine inches.

Inclosed in a neat Box	$8 00
Ordinary Hard Rubber Inhaler	2 00
" " " with Valves.	4 00

GOODWILLIE'S PATENT INHALER,

FOR NITROUS OXIDE GAS, ETHER, CHLOROFORM, ETC.

DESCRIPTION OF INHALER.—A. Faucet, containing the Valves, and revolving quarter of a circle. B. Fresh air Valve. C. Face-piece. D. Inhalation Valve. E. Exhalation Valve.



NOSE COMPRESS.

Introduced by Dr. S. S. Nones.

Convenient for the administering of Gas, where the Inhaler used is without a Face-piece . . $0 50

As the Face-piece covers both the mouth and nostrils, the patient may breathe through either, and by the arrangement of the Valves the breath is thrown off by the exhalation Valve (E), and danger of asphyxia avoided. It is made of Hard Rubber, nicely finished, with two Face-pieces of different sizes.

Complete $10 00

FUSED NITRATE OF AMMONIA.

Manufactured expressly for our sales Best quality. Put up for convenience in Wood Boxes, containing 5 and 10 pounds each.

In original packages, Box included . . . per pound $0 70

S. R. DIVINE'S GRANULATED, FUSED, AND CRYSTALLIZED

NITRATE OF AMMONIA

Is put up in Boxes containing 5 and 10 pounds each, at the following prices:

By the single Box, or less than 20 pounds		per pound	$0 75
For 20 pounds	" 50 "	"	70
" 50 "	" 100 "	"	65

For shipment, the Boxes will be packed in Cases, which will be charged for extra.

RUBBER TUBING.

¼ inch, inside measure	per foot	20
⅜ " "	"	22
½ " "	"	27
⅝ " "	"	32
¾ " "	"	38
1 " "	"	45

RUBBER GAS BAGS, OVAL.

5 Gallons	5 00
6 "	5 50
7 "	6 50
8 "	7 25
9 "	9 00
10 "	10 00

RUBBER GASOMETERS, SQUARE.

18 by 24 inches	6 50
20 by 30 "	8 25
24 by 30 "	10 25
30 by 40 "	12 50

PREPARATIONS FOR OFFICE.

Tincture of Myrrh. 8 oz. Bottles	1 00
" of Catechu. 8 oz. Bottles	75
" of White Oak Bark. 8 oz. Bottles	60
" of Iodine. 1 oz. Glass-stoppered Bottles	35

Creasote. A very superior article.	1 oz. Glass-stoppered Bottles . .	$0 35
Carbolic Acid.	1 oz. " " . .	50
Chromic Acid.	½ oz. " " . .	60
Saturated Solut. Iodine in Creasote.	½ oz. " " . .	50
" " " " Glycerin.	1 oz. " " . .	40
Carbolic Acid and Glycerin.	2 oz. Bottles	40
Styptic Colloid.	2 oz. "	60
Glycerin. 8 oz. Bottles		75
Mercury, Re-distilled. Carefully prepared for making Amalgam, and *warranted pure.* Put up in quarter-pound Bottles		50
Nerve-paste. Arsenic and Creasote, carefully prepared, in Glass-stoppered Bottles, with directions for use		50
Chlorate of Potassa. Pulverized, in 8 oz. Bottles		75
Isinglass Plaster. A neat and unirritating substitute for Adhesive Plaster. 1 yard 6 inches wide, in Box		75

PREPARATIONS OF IRON.

Monsel's Solution, Persulphate of Iron. Per oz. Bottle	25
" Powder, Subsulphate " " "	25
Solution Perchloride of Iron. Per oz. Bottle	25
Sesquichloride of Iron. (Crystallized.) Per oz. Bottle	50

The above solutions may be applied to bleeding surfaces clear, or diluted with water. The solid preparations are preferred by many, especially Monsel's Powder, being more convenient for use.

PHÉNOL SODIQUE.

The attention of the Dental Profession is asked to this new Hæmostatic, Antiseptic, and Disinfecting agent. This preparation will be found a valuable auxiliary in the Dentist's office. It is highly recommended as an Astringent and Styptic application to check excessive bleeding after extraction, and prevent subsequent soreness of the gums. Put up in 8 oz. Bottles, with directions for use 1 00

TOOTH POWDERS.

S. S. White's Tooth Powder, No. 1	per pound	1 50
" " " 2	"	75
J. D. White's Dentine	"	1 75

Objections having been made by many of our Customers to the purchase of Tooth Powder, the constituents of which were unknown to them, we have prepared Dentifrices according to the following formulas, all the ingredients warranted pure:

No. 1.

Orris Root (white),	Turkey Myrrh,
Cuttle-fish Bone (very fine),	White Sugar,
Bicarbonate of Soda (pure),	Precipitated Chalk (English),
Color,	Perfume.

No. 2.

Prepared Oyster Shell,	Ground Cinnamon,
White Sugar,	Dried Carbonate of Soda,
Cinchona Bark,	Powdered Castile Soap,
Powdered Myrrh,	Oil of Lemon,
Orris Root,	Color.

MOUTH WASHES.

Astringent Wash, in 3 oz. Bottles, for Office sale . .	per dozen	$3 75
" " in 16 oz. Bottles, for Office use . .	per bottle	1 25
Saponaceous Toilet Wash, in 4 oz. Bottles, for Office sale	per dozen	3 75

ASTRINGENT WASH.—An agreeable and useful Wash, suitable for the Office and for sale to Patients, combining anodyne, astringent, disinfectant, detergent, tonic and styptic properties.

It is composed of Potass. Chlor., Tinct. Kramer., Tinct. Myrrh, Tinct. Opii Camph., Tinct. Cinch. Co., Tinct. Quillai, Ol. Rosa.

It may be used with or without the brush, in its full strength or diluted with water, to cleanse the teeth or as a wash for the mouth.

It is put up in neat 3 oz. Bottles, wrapped and tied with inside and outside labels, without the manufacturer's name.

The satisfaction with which the Astringent Wash has been received has induced an effort to meet a very general demand for a Wash not so decidedly astringent in its character, and therefore more agreeable for use, where no special diseased conditions exist requiring treatment. We have, therefore, prepared a SAPONACEOUS TOILET WASH intended to meet this demand, composed of Castile Soap, Glycerin, Spirits of Lavender Comp., Tincture Cinchona Comp., Cologne Water. A few drops upon the brush is sufficient.

These Mouth Washes are composed of pure and fresh ingredients, and neatly put up and labeled without the manufacturer's name. Dentists may retail them to their patients with a guarantee of reliability.

DR. I. W. LYON'S

TOOTH TABLETS.

A NEW AND IMPROVED FORM OF TOOTH POWDER.

The advantages of this form are, that it is portable, not liable to scatter or be wasted, and therefore very convenient in traveling. There is no occasion for dipping the brush into the box, thereby soiling that which is not used, but enough for one brushing is taken from the box and put into the mouth; thus, any number of persons may use from the same box with perfect neatness and propriety. It has received the hearty approval of many leading Dentists, to whom the formula has been exhibited. The following Certificates are submitted to those of the Profession who have not had an opportunity of testing it.

This is to certify that being personally acquainted with I. W. Lyon, D.D.S., of New York City, and having been informed by him of the precise ingredients composing the Dentifrice known as "Dr. I. W. Lyon's Tooth Tablets," and having ourselves used the same, we do unhesitatingly commend it to the public as the *best and most convenient Dentifrice now extant:*

W. H. Atkinson,	D. H. Goodwillie,	Alfred W. Allen,
John Allen,	G. A. Mills,	Wm. A. Bronson,
Norman W. Kingsley,	W. W. Allport,	B. W. Franklin,
Frank Abbott,	Chauncey P. Fitch,	R. M. Streeter,
Chas. E. Francis,	W. H. Allen,	I. J. Wetherbee,
	I. A. Salmon.	

Per dozen Boxes (120 Tablets in each Box) $4 00
Retails at 50 cents per Box.

SUPERIOR TEETH BRUSHES.

MANUFACTURED EXPRESSLY FOR THE DENTAL TRADE.

We offer to the Profession a large variety of three, four, and five row Brushes of the very best quality of material and workmanship. For convenience in ordering, we have had them put up in assorted dozens—each Brush differing in style. The Brushes being numbered on the Handles, enables the Dentist or Dealer to select such styles as he may wish to order.

Three-row Brushes	per dozen	$3 00
Four " "	"	4 00
Five " "	"	5 00

In addition to the above, an extensive stock of Imported Brushes, three, four, and five Rows, at prices ranging from 75 cents to $5 per dozen.

OTHER ARTICLES,

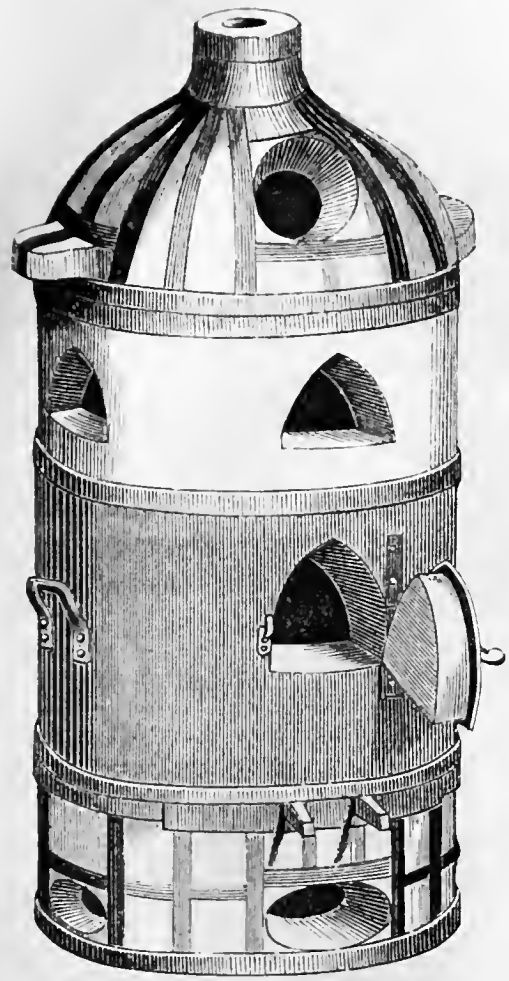
NOT ILLUSTRATED OR CLASSIFIED IN THIS DEPARTMENT,

WILL BE FOUND IN THE

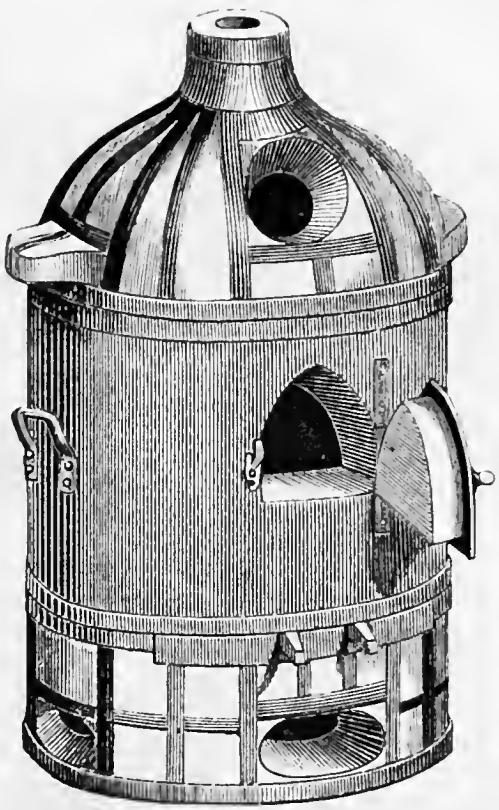
MISCELLANEOUS DEPARTMENT.

MECHANICAL DENTISTRY.

FURNACES.



No. 1, for two Muffles.



No. 1, for one Muffle.

These Furnaces are oval in form, with hinged Doors, the centre Sections cased with Sheet-iron, taking Muffles 12 inches long by $3\frac{3}{4}$ inches wide—inside measurement. Outside measurement of Furnaces, 43 and 34 inches high, 21 inches wide, and 16 inches deep.

No. 1. For two Muffles $25 00

No. 1. " " with 4 Muffles, 6 Slides, and half-peck Fire-clay, packed in Cask for shipping 29 50

No. 1. For one Muffle	$19 00
No. 1. " " with 4 Muffles, 6 Slides, and half-peck Fire-clay, packed in Cask for shipping	23 00
No. 2. A size smaller, taking a Muffle 11 inches long by 3½ inches wide—inside measurement. Outside measurement of Furnace, 33 inches high, 20 inches wide, and 14 inches deep.	16 00
No. 2. For one Muffle, with 4 Muffles, 6 Slides, and half-peck Fire-clay, packed in Cask for shipping	19 50
Muffles, No. 1 . . . . . each	63
" " 2 . . . . . "	50
" " 3 . . . . . "	38
Slides " 1 . . . . . "	10
" " 2 . . . . . "	.09
" " 3 . . . . . "	08

NOTE.—These are Philadelphia prices, freight and expenses added when sold at other Depots.

QUEEN'S PORTABLE JEWELERS' AND DENTISTS' FORGES.

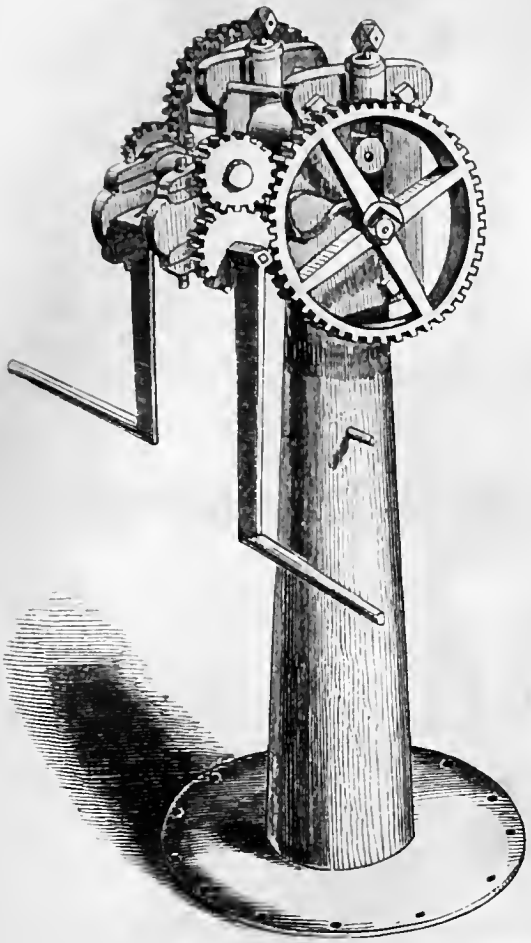
Having a Furnace arrangement consisting of a false bottom to the Fire-place, with a Grate in the centre, and an Iron Bowl between the two Floors to catch and retain spilled metals; also, Boxes about the Grate to sustain the coal around the Crucible or Melting-pot. These Forges possess great advantages over others, having two Slides, by which the Forge can be closely shut up, or arranged in any position necessary to prevent interference to the fire by wind or rain when in use out of doors, or for safety and convenience in-doors; when open, they are entirely out of the way. All the fumes from charcoal and acids are conducted through the Smoke-pipe. Another advantage is, that the Bellows is not liable to injury either from fire or water.

No. 0, weight, 105 pounds	$28 00
No. A, " 145 "	34 00
No. 1, " 230 "	44 00
No. 1½, " 280 "	54 00
No. 2, " 385 "	65 00

The No. 0 Forges are made without Slides for closing, and without Water-troughs.

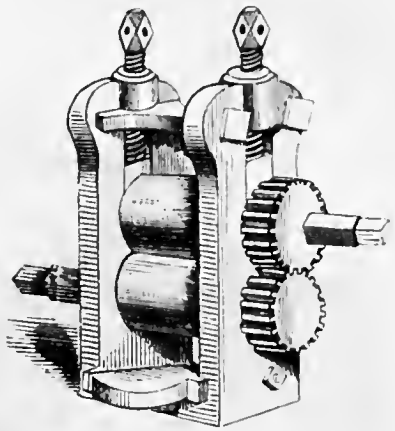
LODGE'S ROLLING MILLS.

MANUFACTURED IN PHILADELPHIA.



$105 Mill.

GEARED MILL.



3, 3½, and 4 inch Rolls.

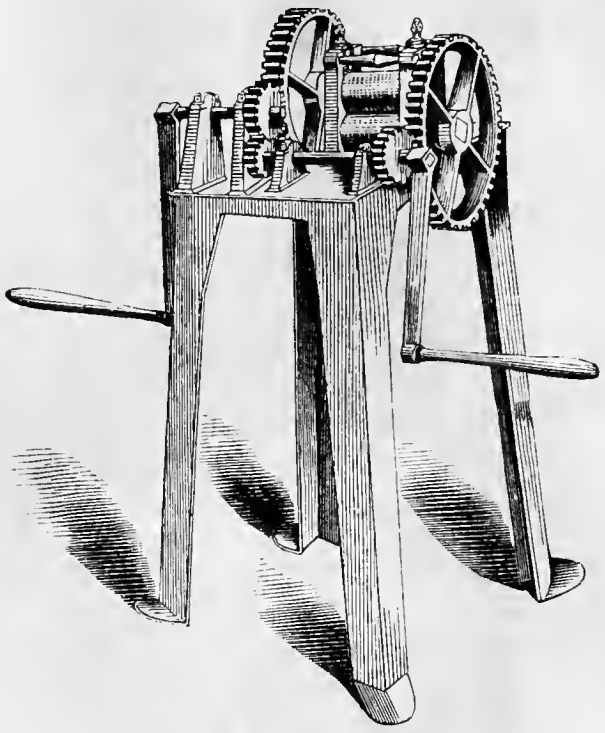
Sold at Manufacturer's prices. Warranted for one year.

3	inch, Plain	$45 00
3	" Geared	55 00
3½	" Plain	55 00
3½	" Geared	60 00
4	" Plain	60 00
4	" Geared	70 00
4	" Double Geared, on Iron Stand.	105 00
5	" Extra Geared, Mounted on Iron Table (Cut on next page)	150 00
Iron Stands		7 50

Boxing, extra.

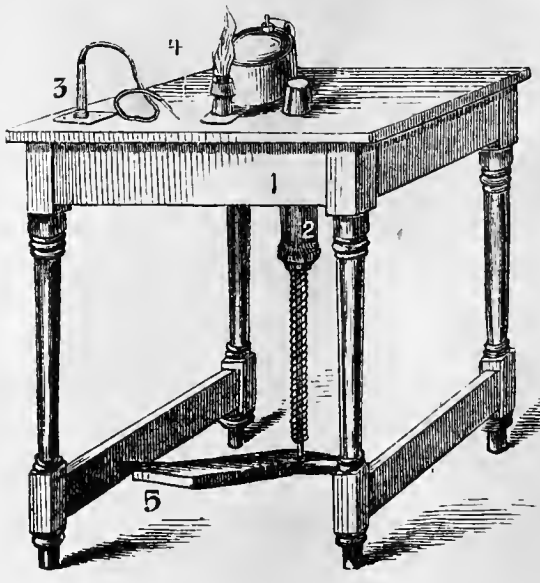
Any size or pattern made to order.

NOTE.—These are Philadelphia prices, freight and expenses added when sold at other Depots.



$150 Mill.

TABLE BLOW-PIPE.



1, Air Chamber; 2, Pump; 3, Pipe; 4, Lamp; 5, Treadle.

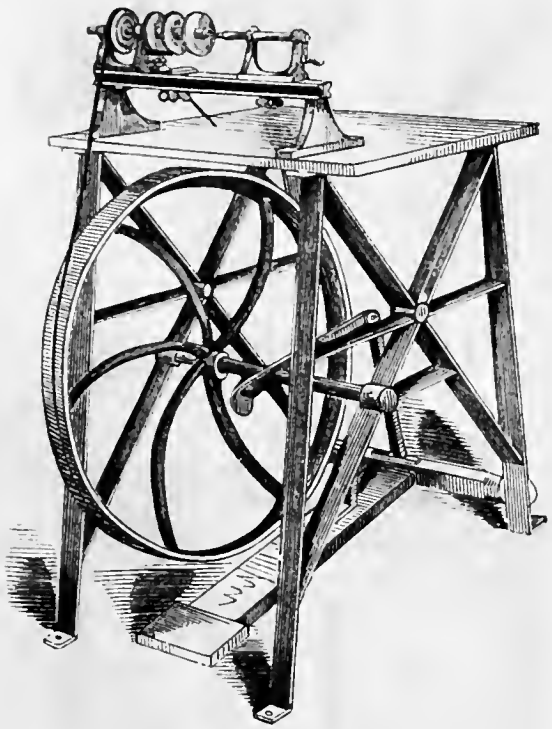
Complete	$25 00
Without Table	21 00

NOTE.—As various lengths of Tubing are used, and different kinds of Lamps, the prices named do not include these articles.

LATHES.

LODGE'S LATHE.

STRONG IRON FRAME.



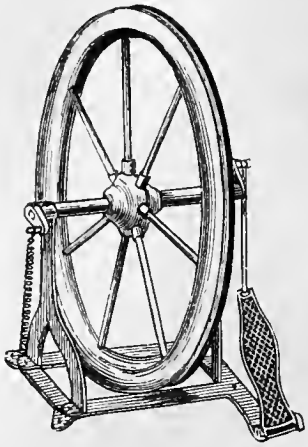
This is a regular Machinist's Lathe, with Shears and Movable Head, for Turning, Grinding, and Polishing $60 00

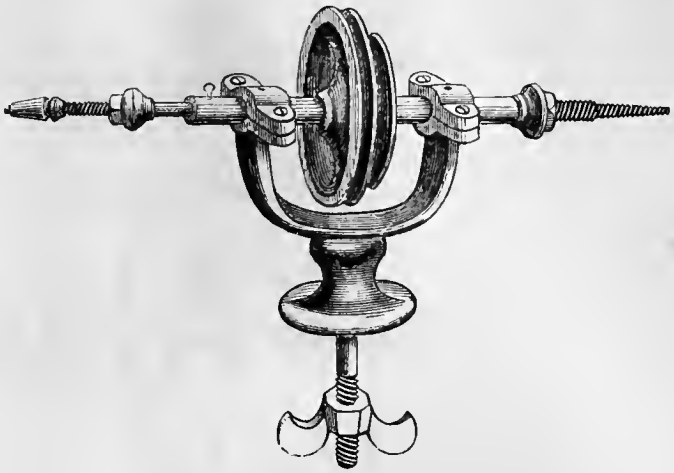
NEW LATHE.—DRIVING-WHEEL DETACHED.

INVENTED BY DR. A. LAWRENCE.

We have had a new set of Patterns made for this Lathe, which are double the thickness of the previous ones, and give much greater weight and strength to the Platform, Supports, and Shaft. The Apparatus is also decidedly improved in every

respect, and we can confidently recommend it as a very desirable Lathe for the Dentist.

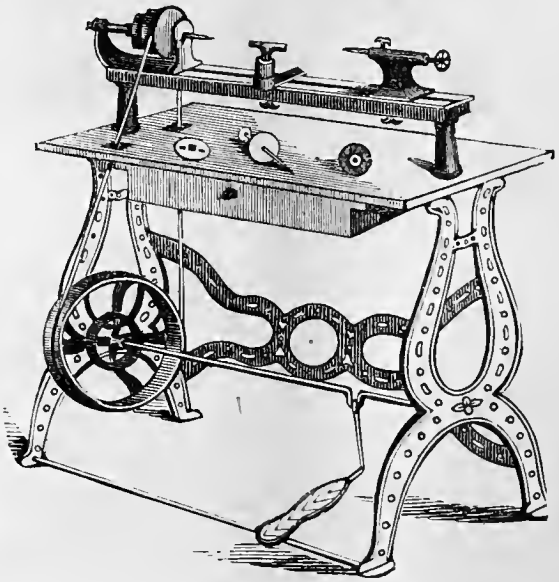




Driving-wheel	$18 00
Head (Brass)	12 00
Cord and Coupling	1 00
Complete	31 00

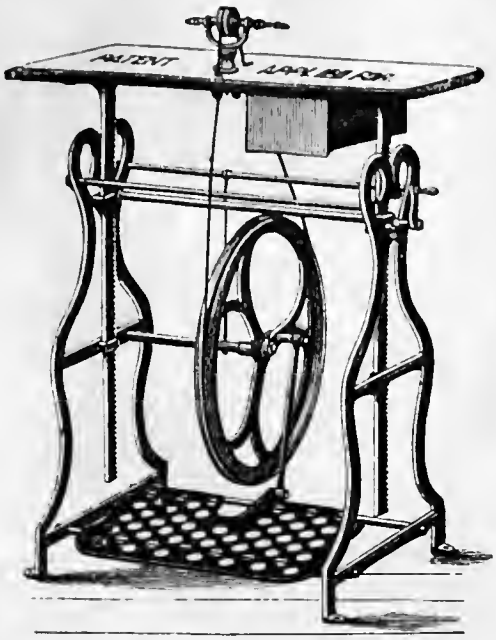
Head of *Iron* is $3 less in price.

AMATEUR LATHE.



This Lathe weighs about 100 pounds The Table is 16 by 20 inches, of Walnut, with a Drawer underneath for Tools. It is arranged for fast or slow speed, and is very handy for the Dentist 35 00

GRISWOLD'S EMPIRE LATHE.



This Lathe is capable of being run with great speed; runs very smooth; it can be raised or lowered at will, so that it can be used to sit down or stand up to in working; it starts readily with heel or toe; can be run with both feet in sitting, or with either foot standing. The Lathe has two elastic Rubber Cords, extra Spindle, Chucks, etc., and is attractive as well as superior in all respects $40 00

THE UNITED STATES LATHE.

This Lathe has a Movable Column and Table, and is capable of being elevated 8 inches, to accommodate the Operator in either a sitting or standing posture.

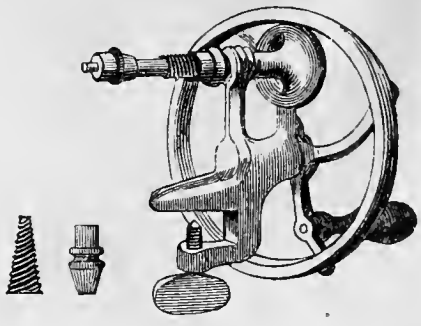
This Lathe is recommended without hesitation. It can be packed in a box 16 inches square, and can be set up in a few minutes.

Lathe, Short Spindle 22 00

" with Long Spindle (see Cut) . . . 23 00

NOISELESS HAND LATHE.

H. COY'S PATENT. OCTOBER 2, 1866.



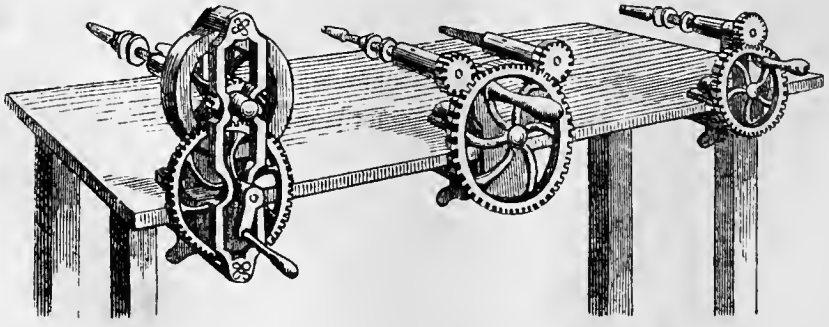
The Cut illustrates a Lathe, designed especially for the Office; it is entirely noiseless. Having neither cog-wheels nor belt, it is free from oil, dirt, and the trouble of adjustment. The motive power is communicated by friction gained by covering the small Wheel, or Pulley, with a Rubber Ring which comes in contact with the inner surface of the Driving-wheel. In material and workmanship it is superior to any small Lathes heretofore offered, and is designed to meet all the requirements of the Office, and of the traveling Dentist. Driving-wheel, $6\frac{1}{2}$ inches in diameter; small Wheel, 2 inches in diameter; weight, $2\frac{3}{4}$ pounds . . $7 00

Extra quality 10 00

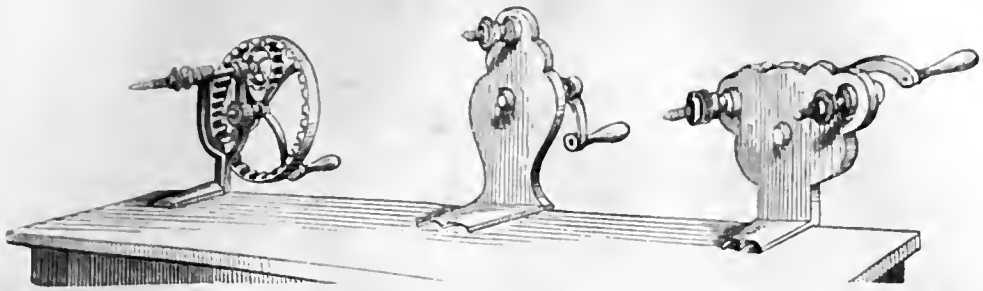
NOTE.—The Mandril and Axle-screw of the "Extra" are of Steel, and are coned and ground in. Rim of Driving-wheel turned all over. Table-face of Clamp hollowed and float-cut, and the end of the Clamp-screw countersunk, making it very firm on the table with light pressure. The japanning and polish are also extra fine. Ivory Handle.

TABLE LATHES.

No. 1. No. 2. No. 3.



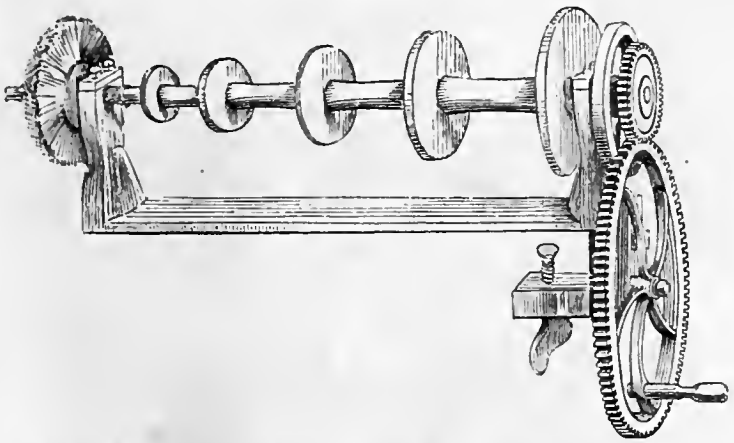
No. 4. No. 5. No. 6.



No. 1. For Hand or Foot	$10 00
No. 2. With two Spindles	6 00
No. 3. One Spindle	4 50
No. 4. Skeleton (greatly improved)	4 00
No. 5. One Spindle, inclosed	4 00
No. 5. " " " larger size	5 00
No. 6. Two " "	6 00

N. B.—No. 1 has a Treadle and Strap, not shown in Cut, to be used with the foot; also, an extra Spindle and Chuck.

PARALLEL LATHE.



This Lathe is capable of running five Stones, a Brush, and a Drill at the same time. Outline size, 10 by 16 inches; weight, 8 pounds; Frame of Cast-iron, with Steel Spindle and Axles. It can be easily adjusted to the Table or Work-bench. The Collars that retain the Grindstones are made of Wood, and the lengths are proportioned according to the requirements of the hand. Corundum Wheels included 10 50

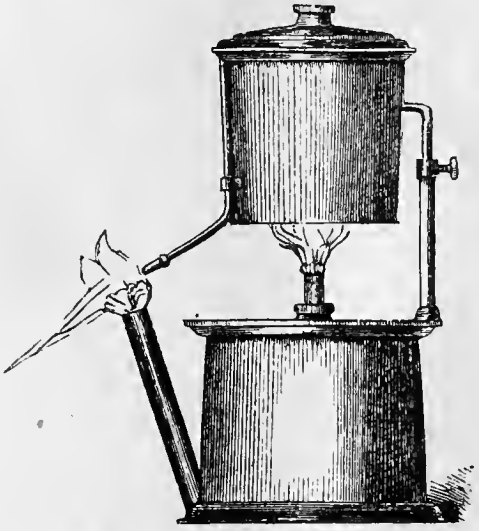
SPERM OIL.

Pure "Head Matter" of the Sperm Whale. The best Lubricator known for Lathes, Machinery, etc. Three-ounce Bottles 25

MACOMBER'S GAS BLOW-PIPE.

This is an Appliance designed to be attached to a Gas-pipe, for using Gas instead of Oil or Alcohol. The Tube is double, or rather a Tube inclosing a Tube, the atmospheric air being driven through the centre Tube, adding force and giving a cylindrical form to the flame $5 00

SELF-ACTING BLOW-PIPE.



The Lamp is made of Tin, japanned, and the Boiler of Brass, each holding half a pint of Alcohol. It has a Set-screw on the Upright, allowing the Boiler to be moved up or down; also two Nozzles to be attached to the Pipe, whereby the flame can be regulated. It is perfectly safe, as, in addition to being substantially made, it has a Safety-valve in the top of Boiler. For cheapness and utility it has no equal 5 50

N. B.—One of the Nozzles will be found screwed on to the top of the Safety-valve

MOUTH BLOW-PIPES.

Brass, our own make, with Chamber and Screw-joint	$1 25
" " " with Bulb	1 25
" " " heavy, with mouth end tinned, 11 inch	60
" " " " " " " 13 "	65
" " " " " " " 15 "	70
" German, 9 inch	18
" " 10 "	20
" " 11 "	22
" " 12 "	25
" " 13 "	30

IMPROVED SOLDERING PAN OR FURNACE.

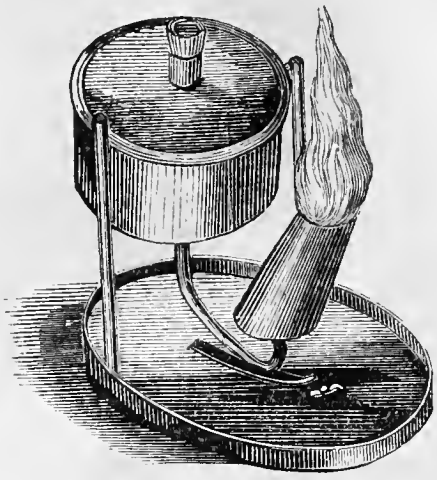
MADE OF RUSSIA IRON.

Dimensions: height, 5 inches; diameter, 6½ inches. A Cover with movable Lid, to put on while heating up the case before soldering; also placed on after soldering, with the Lid and Door closed to prevent rapid cooling; Handle attached by a pivot to allow the Furnace to revolve.

Complete $1 75

SOLDERING LAMP.

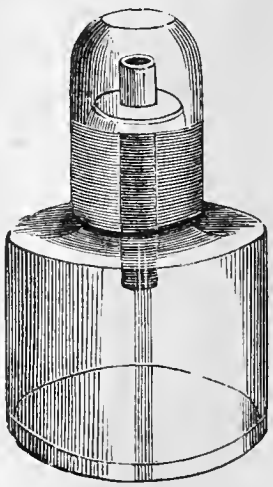
FRANKLIN'S SAFETY.



This seems to be a perfectly safe Lamp, the body of Alcohol being kept some distance from the Wick. (See *Miscellaneous.*) $1 00

GLASS SPIRIT LAMPS.

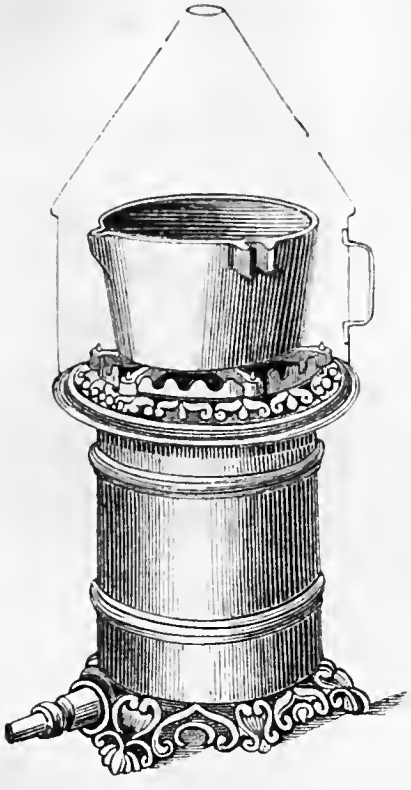
Oval.



Square.

Oval, 4 inches high, 3 inches wide	75
Square " " 2½ " "	75
" 3 " " 2 " "	50

GAS STOVE.



For heating up Vulcanizers, melting Zinc or Lead, and for general Laboratory purposes	$2 50
With Sheet-iron Cover (as shown in Cut)	3 25
Heavy Cast-iron Ladle with detached Handle	1 00

GOLD, SILVER, AND PLATINUM,

PLATE, WIRE, ETC.

(See page 28.)

ALUMINIUM PLATE

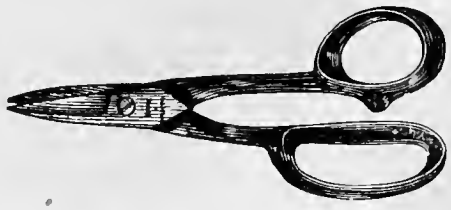
AS A BASE FOR ARTIFICIAL TEETH.

The cost of Aluminium will probably be reduced. Present price per ounce	3 75

PATTERN METAL.

This article, which is composed of Lead and Tin (the surface being tin), is equal to pure metal for the above-named purpose . per pound $0 50

PLATE SHEARS.



With Scissor form of Handles. (See *Miscellaneous.*) 1 00

ROMMETIN'S (Successor to FROID) PLATE FILES.

Direct Importation.

Flat,	Half-soft,	resembling	Stubs'	Bastard,	3	inch	.	.	.	each	18
"	"	"	"		3½	"	.	.	.	"	18
"	"	"	"		4	"	.	.	.	"	22
"	"	"	"		4½	"	.	.	.	"	25
"	"	"	"		5	"	.	.	.	"	30
"	Soft,	"	Stubs'	Smooth,	3	"	.	.	.	"	23
"	"	"	"		3½	"	.	.	.	"	23
"	"	"	"		4	"	.	.	.	"	27
"	"	"	"		4½	"	.	.	.	"	32
"	"	"	"		5	"	.	.	.	"	35
Half-round,	Half-soft or	Bastard,	4½	inch	.	.	.	.	.	"	20
"	"	"	5	"	.	.	.	.	.	"	22
"	"	"	6	"	.	.	.	.	.	"	30
"	Soft or	Smooth,	4½	"	.	.	.	.	.	"	25
"	"	"	5	"	.	.	.	.	.	"	27
"	"	"	6	"	.	.	.	.	.	"	35
Round,	Half-soft or	Bastard,	4	inch	.	.	.	.	.	"	18
"	"	"	5	"	.	.	.	.	.	"	22
"	"	"	6	"	.	.	.	.	.	"	30
Triangle	"	"	4	"	.	.	.	.	.	"	20
"	"	"	5	"	.	.	.	.	.	"	24
"	"	"	6	"	.	.	.	.	.	"	32
"	Soft or	Smooth,	2 to 3	"	.	.	.	.	.	"	20

STUBS' PLATE FILES.

Direct Importation.

Half-round, Bastard, 4 inch		each	$0 32
" " 4½ "		"	35
" " 5 "		"	38
" " 5½ "		"	44
" " 6 "		"	50
" Smooth, 4 "		"	35
" " 5 "		"	44
" " 6 "		"	56
" Bastard, 3 to 3½ inch		"	25
" Smooth, 3 to 3½ "		"	30
Round, Bastard, 4 inch		"	22
" " 5 "		"	28
" " 6 "		"	35
Flat " 4 "		"	22
" " 5 "		"	28
" " 6 "		"	40
Half-round " Steel Handles, 4 inch		"	38
" " " " 5 "		"	44
" " " " 6 "		"	56

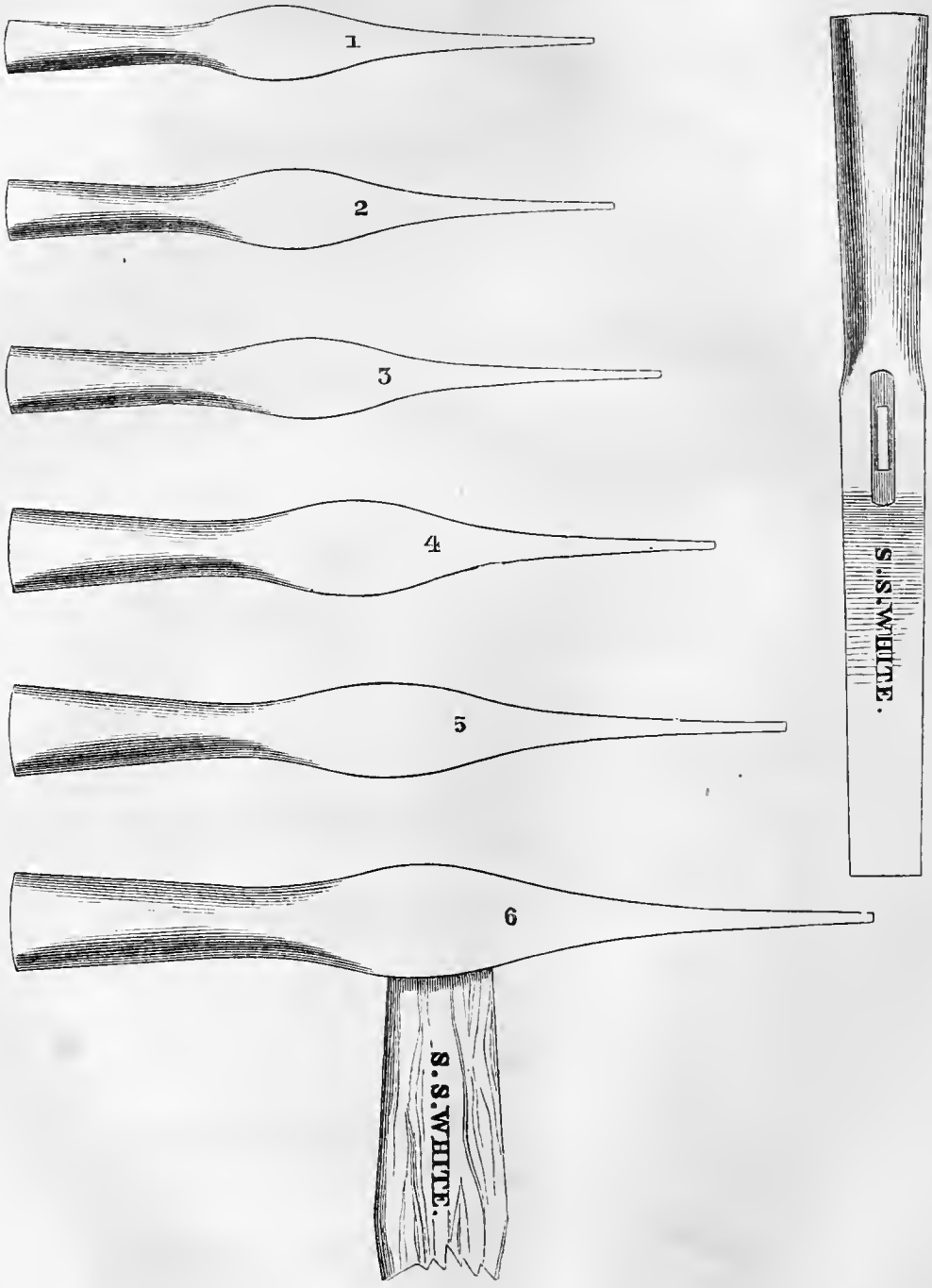
PLATE AND WIRE GAUGE.

BROWN & SHARPE'S STANDARD.

The Standard Gauge Plate of Brown & Sharpe's manufacture has been adopted by the principal Brass Manufacturers, and will no doubt become the Standard Gauge of the United States. In ordering Plate by Gauge, we suggest the propriety of giving the name of the maker, as there is considerable variation in the Gauges now in use 3 00

HAMMERS FOR RIVETING.

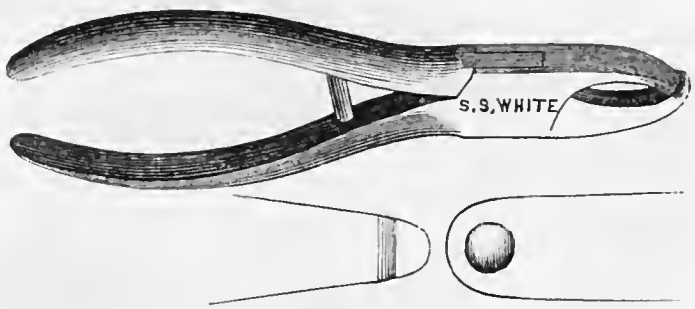
WITH HANDLES.



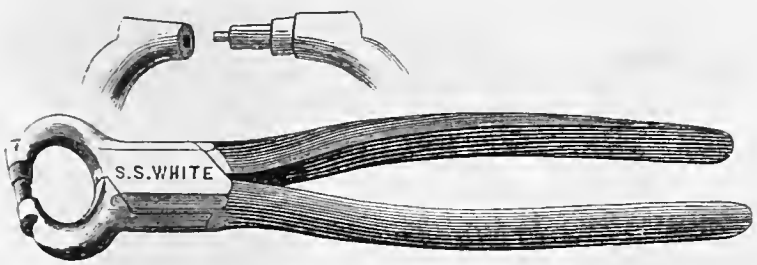
Each $0 60

MECHANICAL FORCEPS.

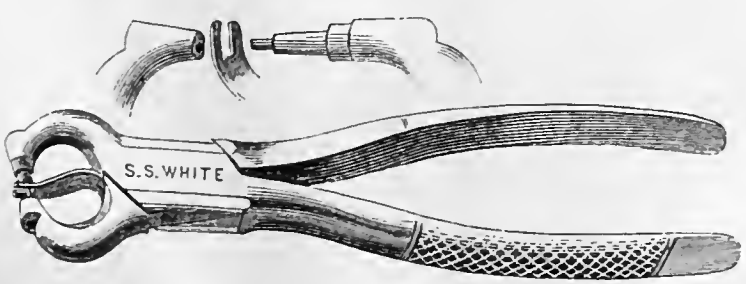
Nipper, for cutting out chambers, and cutting off backings from Plates. Cutting-edge regulated by a Set-screw $2 50



Nipper, for cutting out Plate 2 00



Punch, for Rivet Holes 2 00



Improved Punch, for Rivet Holes 3 50

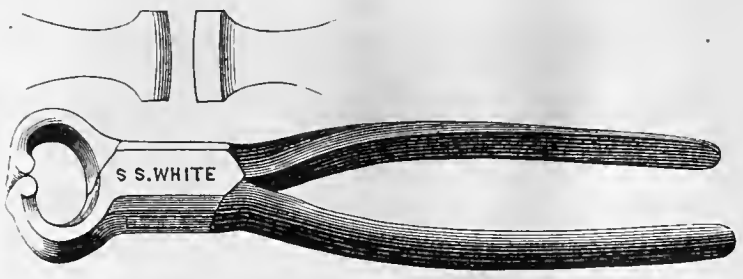


Plate Bender, for Upper Plate $2 00

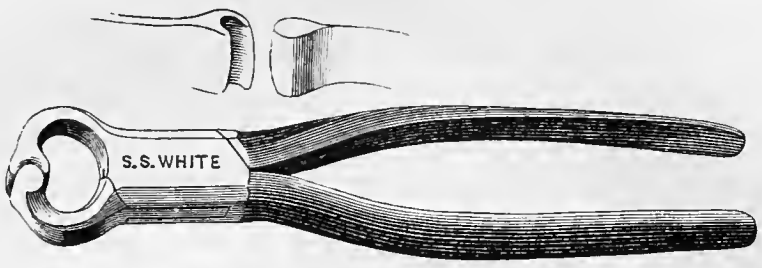
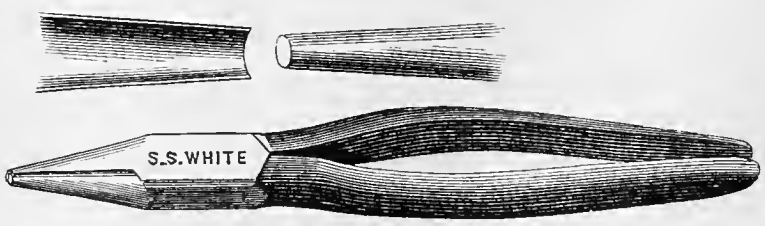


Plate Bender, for Lower Plate 2 00



Clasp Bender 1 75

CRUCIBLE TONGS.

Polished, with Scissor form of Handles, from 9 to 12 inches in length	.	1 75
Crucible Tongs. Iron, Spring Handle, from 16 to 20 inches long	. .	50
" Steel, with Joints, from 18 to 24 inches long	. .	1 25

BRUSH WHEELS.

Cotton or Buff Wheels, 32 sizes	from $0 16 to 1 00	
Brush Wheels, 175 varieties	" 15 to 1 00	

NOTE.—Each Brush is numbered, and can be duplicated to order. When ordering where the number is not known, please state the number of rows in width, diameter, whether hard or soft, straight or cup-shaped.

FELT POLISHING WHEELS.

These Wheels are made of a very fine article of Felt, $\frac{3}{8}$ inch and $\frac{1}{2}$ inch in thickness. They are designed for finishing the Vulcanite or Rubber Base. They retain the Powder much better than the ordinary Cotton or Brush Wheel. Those who have used them recommend them.

$1\frac{3}{4}$ inches in diameter	$0 20
$2\frac{1}{2}$ " "	40

RUBBER WHEELS AND CONES.

This Material in the above form has been thoroughly tested by skillful Operators, and is pronounced superior to all other substances as a vehicle for carrying Powders used in polishing Hard Rubber. Should be wet when used.

Wheels $1\frac{3}{4}$ inches in diameter	$0 20
" $2\frac{1}{2}$ " "	40
Cones 1 inch " $1\frac{3}{4}$ inches long	20

POLISHING MATERIALS.

Pumice Stone. Finest quality. per pound package	15
Prepared Chalk " " "	15
Powdered Calcined Buck-horn, large Boxes	38
" " " small "	12
Tape covered with Buck-horn, for finishing Fillings . per piece	08
Crocus, in small Boxes convenient for use	10
Tripoli, " " "	10
Emery, " " "	10
Rotten Stone, " " "	10
Rouge, in ounce Boxes	25

NOTE.—Buck-horn is one of the very best substances known for polishing Fillings, removing light deposits of Tartar, and polishing the Teeth after Scaling. It is also very efficient in finishing Gold and Silver Plate. Put up in wood Boxes.

WAX PREPARATIONS.

WHITE AND YELLOW WAX FOR IMPRESSIONS.

Warranted pure; put up in thin cakes, convenient for use and adapted for the purposes for which they are intended, in half-pound Boxes.

White	per box	$0 70
Yellow	"	42

WAX COMPOUND.

The attention of the Profession is called to this new Compound, which is pronounced to be the best material yet presented for obtaining impressions of the mouth. It is tough, firm, and takes a very sharp impression.

Put up in half-pound Boxes	per box	$0 70

GUTTA-PERCHA AND WAX.

This Combination is pronounced a very superior article for taking impressions of the mouth. It is plastic, tough, and easily softened, either by dry heat or in warm water.

Put up in half-pound Boxes	per box	$0 50

WAX AND PARAFFIN.

White and Pink, for taking impressions. These Preparations are highly recommended by many Operators who have long used them. Soften with a *dry* heat, taking care to avoid *overheating*. Previous to taking the impression, the parts should be wiped dry with a napkin.

Put up in half-pound Boxes	per box	$0 50

WAX FOR BASE PLATES.

Wax in thin square sheets, for Base Plates in Vulcanite Work.

In half-pound Boxes	per box	50

Gutta-percha and Wax, in sheets as above, for same purpose.

In half-pound Boxes	per box	50

MOULDING SAND FOR DENTAL USE.

A superior article. Put up in Barrels and packed securely for shipping.

Per Barrel	3 00
Per Quart	06

BAILEY'S FLASKS FOR MAKING METAL DIES.

Fig. 1.

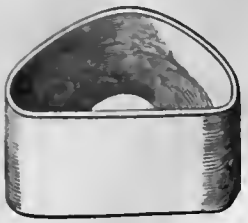


Fig. 2.

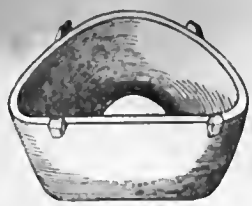
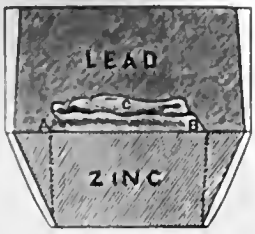


Fig. 3.



DIRECTIONS FOR USE.

Place a shallow Plaster Cast, *a*, *b*, *c*, on a level surface; turn over it Ring No. 1, with Joint side down; pack the Sand in it, level off the top, turn up the Ring, pare the Sand down to the surface required for the Plate, a light tap on the Cast and it will fall out; pour in the Zinc; when the surface is covered, place Ring No. 2 over it, and fill up immediately; knock out the Sand, invert the Flask and pour the Lead upon the Zinc; part and remove the Rings, and with a few sharp blows at the joint the Dies will separate. There are two sizes.

Per Pair	$0 50
" Set	1 00

MOULDING FLASKS.

HAWES'.

Fig. 1.

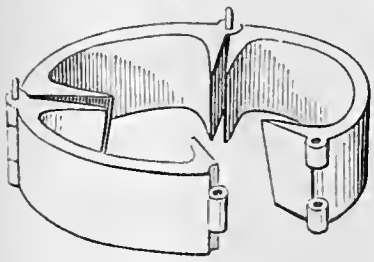


Fig. 2.

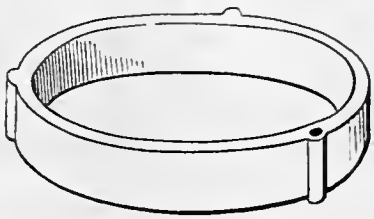


Fig. 3.

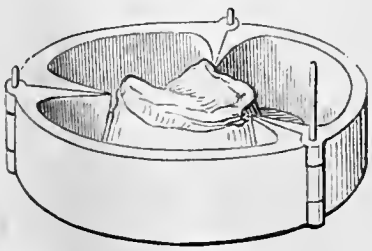
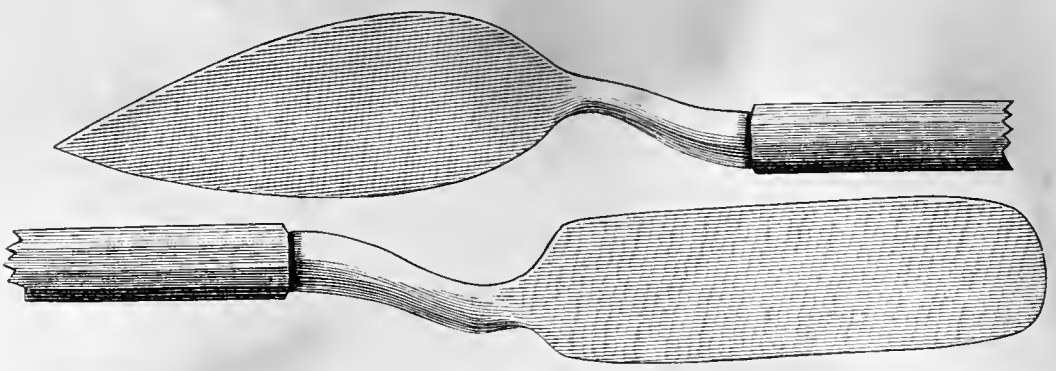


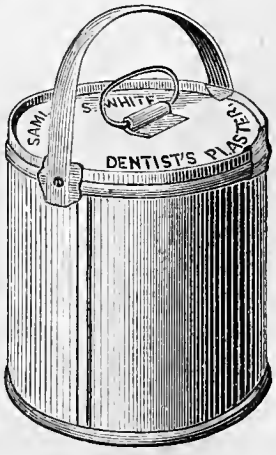
Fig. 1 represents the lower section of the Flask, slightly opened, to show the Joints. Fig. 2 is the upper section. When ready for use, the lower section is closed and confined by a Pin, and the Plaster Model placed in it, as represented in Fig. 3 . . . . . $3 00

DOUBLE-END SPATULA FOR SAND MOULDING.



The Cut shows the size and form of the Instrument; represented in two parts on account of its length $0 75

A SUPERIOR ARTICLE OF DENTAL PLASTER IN AIR-TIGHT CANS.



We have now on hand a supply of Plaster in painted Sheet-iron Cans, containing from six quarts to three pecks, at the following prices:

Six-quart Cans	$0 75
Twelve-quart Cans	1 25
Half-bushel Cans	1 60
Three-peck Cans	2 25
ALSO,	
Quarter Barrel	2 00
Half Barrel	3 25
One Barrel	4 75

The above are the prices at the Philadelphia Depot. Boxing Cans, extra. Porterage additional on Barrels, half Barrels, and quarter Barrels, when shipped separately.

Freight and Expenses will be added when sold at other Depots.

COATINGS FOR PLASTER CASTS.

Collodion, in 2 oz. Bottles, with Brush	$0 50
Sandarac Varnish, in 2 oz. Bottles	25
Liquid Silex, " "	20

FRANKLIN'S IMPRESSION CUPS.

FOR UNDER JAW.

Upper Side.

Under Side.

The advantage of this Cup over others in use—*independent of its superior shape and adaptation*—is in having a surplus of Plaster to be acted upon after the Cup is placed in the mouth and brought to its proper position, thus preventing the occurrence of any blanks or other imperfections in the impression. Made of Britannia Metal, of one size only . 75

PORCELAIN IMPRESSION CUPS.

"Porcelain Impression Trays remedy at once the great inconvenience to which we have all been put, from the difficulty of having our Trays kept sufficiently clean, a difficulty not easily got over with the ordinary Metal ones, and even Silver is open to the same objection, and must convey to our patients unpleasant thoughts with regard to their antecedents. With the Porcelain Trays we have all that is desirable, viz., cleanliness, strength, and beauty."—*British Journal of Dental Science.*

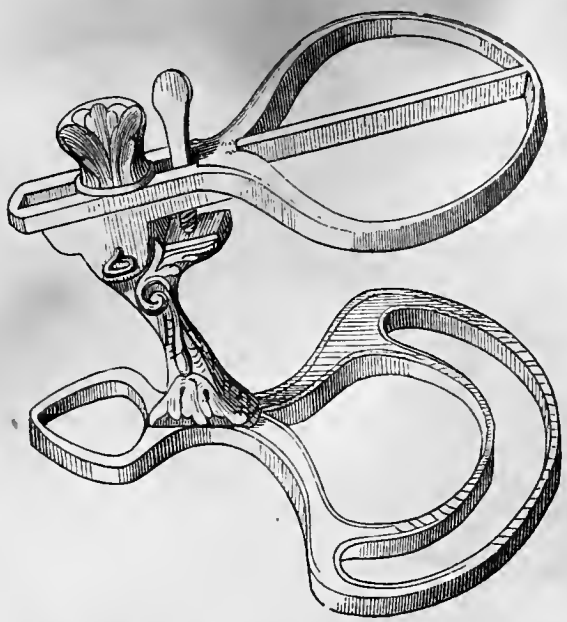
A variety of these beautiful Trays have been received from the English manufacturer $0 50

BRITANNIA IMPRESSION CUPS.

Seven sizes for the Upper jaw, five for the Lower jaw, and six varieties for the Lower jaw where the Incisors are retained 50

ARTICULATOR, No. 1.

INVENTED BY W. H. SMITH, NEWPORT, R. I.



This is made of Brass, having a Screw and Hinge, whereby it can be adjusted to any desired angle, also a Set-screw, allowing the top Plate to slide either backward or forward. It has met with general favor by those who have used it $1 00

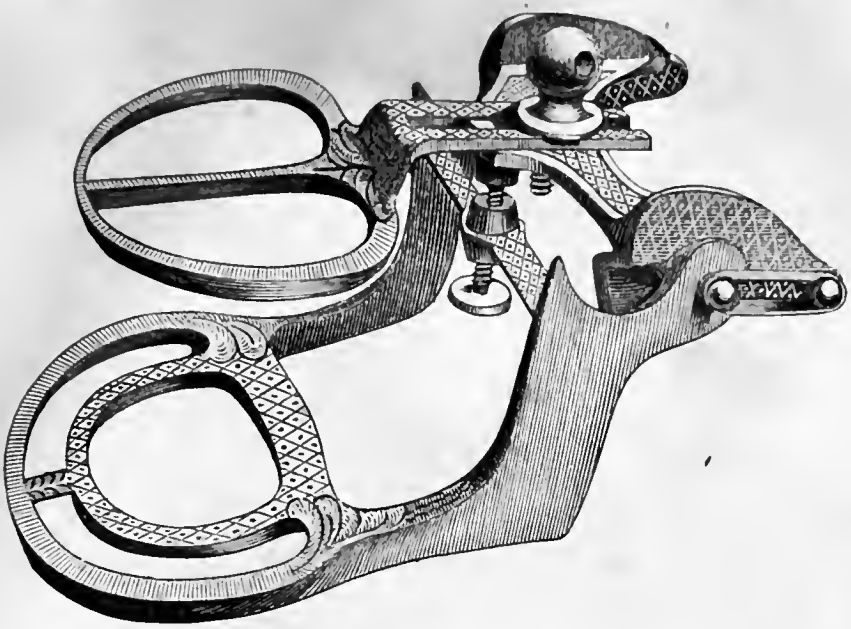
ARTICULATOR, No. 2.

A NEW DESIGN.

This is a more substantial article and better finished than No. 1. It has the same movements, with the advantage that the top Plate can be thrown all the way back, and that the Set-screw for raising the top Plate is more conveniently arranged 2 50

ARTICULATOR, No. 3.

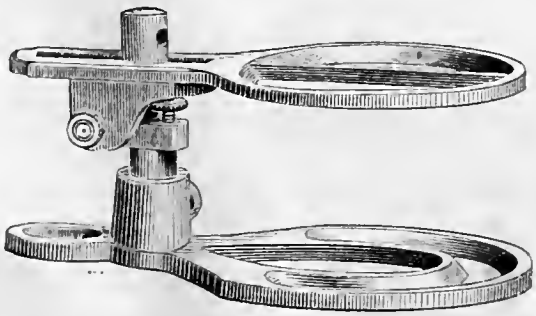
PATENT APPLIED FOR BY THE INVENTOR.



This Articulator is an entirely new design, and is recommended to the Profession as the most perfect in the market, having all the necessary movements for obtaining a correct Articulation of Artificial Dentures. The lower Plate is modeled from the natural jaw, and moves on cone-shaped Pivots in V-shaped Grooves (without Hinges), being retained in position by elastic rubber Bands or Rings. A backward, forward, and lateral motion is provided for, corresponding with the movements of the natural jaw, by which the arrangement of the Denture can be practically tested without disturbing the Articulation. The upper Plate has a backward and forward movement of two inches, and may be retained at any point by the Set-screw. The upper Plate has a double bend, so that when reversed from the position shown in the Cut an increase of one inch in the space is obtained between the Plates, allowing for both upper and lower Dentures. The Instrument is substantially made and nicely finished . . . $3 00

ARTICULATOR, No. 4.

SNOW & LEWIS'.



This has the general movements of No. 1. It is capable of an elevation of half an inch, by means of a Post, fitting into a Socket attached to the lower Plate, and can be secured at any point within this space by a Set-screw 2 00

CORUNDUM WHEELS, ETC.

No. 00	each	$0 07
No. 0	"	09
No. 1	"	12
No. 2	"	16
No. 3	"	20
No. 4	"	25
No. 5	"	30
No. 6	"	40
No. 7	"	60
No. 8	"	1 00
No. 9	"	2 00
No. 10	"	3 00

ALSO,

Corundum Cones	"	20
" Cups, small	"	30
" " larger	"	40
" Files, Round, Taper, and Flat Oval	"	30
" Slabs, small	"	30
" " large	"	60

NOTE.—For Illustrations of size and form, see folded pages at the end of the Catalogue.

OTHER ARTICLES,

NOT ILLUSTRATED OR CLASSIFIED IN THIS DEPARTMENT,

WILL BE FOUND IN THE

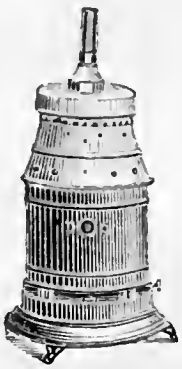
MISCELLANEOUS DEPARTMENT.

VULCANITE.

VULCANIZING APPARATUS, TOOLS, ETC.

B. T. WHITNEY'S VULCANIZING MACHINES.

For Alcohol and Gas.



For Kerosene.

The Heater is composed entirely of Copper and Brass, is of two pieces only, a copper Pot, and brass Head that screws on to the Pot, dispensing with all bolts and nuts. They are uniformly $3\frac{7}{8}$ inches diameter inside; for two Flasks 5 inches, and for three Flasks 7 inches deep. The whole thing complete for use only weighs from 4 to $5\frac{1}{4}$ pounds, according to the size, whether for two or three Flasks. Special directions for using accompany each Machine.

The heat is applied by either Gas, Alcohol, or Kerosene. Apparatus for burning either is furnished as required at the prices named. The Kerosene Stove is also excellent for Laboratory use in heating Flasks, for packing, etc.

No. 1	Vulcanizer,	one Flask	$15 00
No. 2	"	two "	16 00
No. 3	"	three "	17 00

WHITNEY'S FLASKS.

Old Style. New Style.

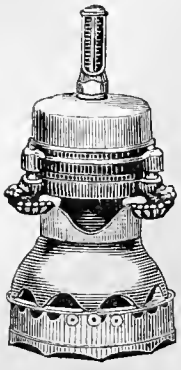
An alteration has recently been made in this Flask by reversing the position of the Bolts, fitting the Head into the hole in the lower part of the Flask, and using a Nut on top.

Whitney's Flask, of Malleable Iron	$0 87
Bolts for Flask, per set of 3	18

HAYES' IRON-CLAD OVENS.

FOR ONE OR TWO FLASKS.

Patented March 5th, 1861, and April 3d, 1866.



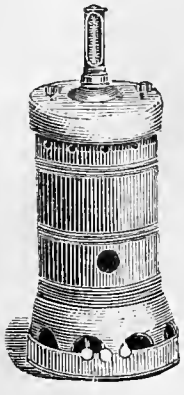
These Ovens are small and compact. They are of Copper of the usual thickness, which is surrounded with a Shell of Malleable Iron, $\frac{1}{8}$ inch thick, and strong enough of itself to withstand many times the strain required in Vulcanizing. They may be used therefore safely till the Copper is entirely destroyed by corrosion, which may then be renewed at small expense.

No. 1.	Oven, one Flask	$15 00
No. 2.	" two "	16 00

HAYES' IRON-CLAD BOILERS.

FOR TWO OR THREE FLASKS.

Patented July 8th, 1862, and April 3d, 1866.

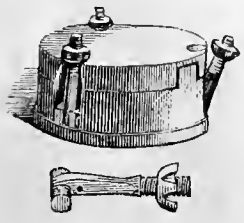


These Boilers are made with and without the Iron-clad Shell. The Cover is secured by three Set-screws, which play in a movable Screw Collar, and produce direct pressure upon the Packing Joint. The Thermometer Bulb is immersed in a Mercury bath outside the Steam Chamber. These Vulcanizers are furnished with Gas, Alcohol, or Kerosene Burners, as may be desired, at prices named below. They are represented by the Cuts as standing upon the Kerosene Heaters.

No. 2.	Copper Boiler, two Flasks . .	$16 00
No. 3.	" three " . .	17 00
No. 2.	Iron-clad Boiler, two " . .	17 00
No. 3.	" three " . .	18 00

HAYES' FLASKS.

WITH IMPROVED CLAMPS.

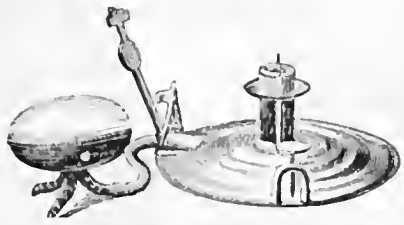


The Lug-joint is so constructed that the strain all comes upon the casting. The Pin only serves to keep the Lug in place while not in use. The several pieces being attached together, are not liable to get lost or mislaid.

Flask for Vulcanizing Oven or Boiler .	$0 37
Clamp for Flask	50

AUTOMATIC LAMP FOR VULCANIZING.

WITH SELF-ACTING CUT-OFF.



Patented Dec. 1, 1863.

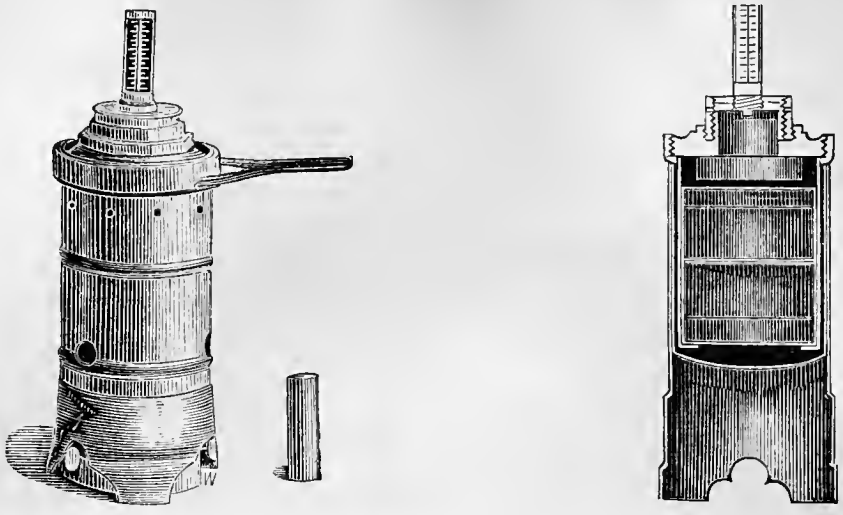
This Automatic Lamp may be used for Gas or Alcohol, and with or without the Automatic arrangement. When properly adjusted, the flow of Gas or Alcohol is controlled by a spring Cut-off, which is held open by a fusible alloy, which breaks loose and extinguishes the flames when the heat reaches a point slightly above that required to finish the process, and before the work or the vessel can receive injury. The Wick, being protected from combustion, does not require renewal.

For Gas or Alcohol, $1 50, or 50 cents extra for both.

Alcohol Holder	$0 25
Kerosene Union Stove	2 50
" " " with Jacket to fit Whitney's Vulcanizer	2 75
Kerosene Burner, Hayes'	2 00
Lamp, for Alcohol, Whitney's	75
Packing for Vulcanizer, Hayes'	10
" " " Whitney's	05
" Duster and contents	25
Thermometer, for Oven or Boiler	2 00
" Tube and Scale	1 00
Wrenches, for Oven or Boiler, Hayes'	25
" Round, Whitney's	30
" Straight, "	25
" Flask, "	10

VULCANIZER AND PACKER COMBINED.

A. B. WOODARD'S IMPROVED.



Of this Vulcanizer, the Inventor says:

"The fact that Rubber was more plastic while exposed to a *high* heat, led me to the conclusion that in the Vulcanizer itself was *the place* to close the Flask.

"I therefore devised the plan of inserting a movable Valve or Piston in the cover or top of the Vulcanizer, and connecting with it a Clamp and Flask; the action of the steam gradually raising the Valve or Piston, thus producing a motive power by the Steam itself, by which the Flasks were gradually and automatically closed.

"I claim the following points of improvement over other Vulcanizers:

"1st. It automatically packs the Rubber, thus saving the time consumed in the ordinary way of packing.

"2d. The liability of breaking and spreading the Blocks is avoided, as the Flasks are brought together by a moderate and continued pressure while the Rubber is in its most plastic state.

"3d. The Cover and Boiler being connected by a Screw-coupling which does away with nuts or bolts; also, there being no friction on the packing; the coupling serving at the same time as Wrench and Handle to the Boiler.

"4th. There being no bolts with the Clamp or Flask, make the Machine, as a whole, the most durable. All parts of it will last equally long as the Copper Boiler itself, which is made extra thickness. The Dentist will find it a great saving in using this Machine, as he will avoid extra expenses for new Flasks and Clamps, which are now so often broken."

This Machine will be made of one size only (unless *specially* ordered), which will be for two Cases or Flasks.

A Two-case Vulcanizer with Kerosene Lamp, Flasks, etc., complete	$24 00
With Kerosene Stove in place of Lamp . . . extra	1 00
With Gas Stove in place of Lamp . . . . . "	1 00
Gas or Kerosene Stove without the Jacket	2 50
Flasks adapted to the Vulcanizer	60
Thermometer (Tube and Scale)	1 00
Packing for Valve	10
" " Cover	10

ALFRED CENTER, N. Y., Oct. 4th, 1866.

DR. A. B. WOODARD.—*Dear Sir:* I have used one of your Vulcanizers and Packers for more than a year, and think it the best machine that I ever used. It works perfect, and I have never made a failure with it. I can refit old plates that have become loose by absorption of the gums, so that they will fit as good as new plates with very little trouble.

Respectfully yours, C. M. ALLEN.

PHILADELPHIA, May 10th, 1867.

MR. S. S. WHITE.—*Dear Sir:* We have fully tested Dr. Woodard's Patent Improved Self-packing Vulcanizer, and find it to possess all the qualities claimed for it. It is certainly a very superior apparatus.

Very truly yours, MOORE & ZENER,
Dental Laboratory, N. W. cor. 5th and Arch Sts.

PHILADELPHIA, May 27th, 1867.

MR. S. S. WHITE.—We have used Woodard's Self-packing Vulcanizer with success. It accomplishes all that is claimed for it by the inventor. The time for Vulcanizing is somewhat longer than in some other Vulcanizers, but the result is satisfactory.

Yours, etc., CLEMSON & FORD,
Dental Laboratory, No. 508 Arch St.

BORDENTOWN, N. J., May 29th, 1867.

SAMUEL S. WHITE, ESQ.—*Dear Sir:* For more than a year I have used Woodard's Vulcanizer, and say in reference to it, that in *every* respect it is superior to any Vulcanizer I ever used, and I have tried many. I have frequently made the remark that all Mr. Woodard needed to have his Boiler a universal thing, was simply to get every Dentist to give it one trial, and they would cast aside at once all others.

Yours truly, JOHN M. COMEGYS.

BUFFALO, N. Y., June 1st, 1867.

DR. A. B. WOODARD.—*Dear Sir:* I have had in my office, for the past year, your Vulcanizer and Packer, together with others; have experimented with and given all a practical trial. I have no hesitation in saying that, in the hands of a competent Dentist, your Machine has advantages over *all* the others combined. Very truly yours, M. B. STRAIGHT.

DR. A. B. WOODARD.—*Dear Sir:* Having seen the practical working of your Vulcanizer and Packer during the past year, I can heartily indorse the above.

Yours truly, JAS. G. BARBOUR.

ALFRED, ALLEGANY CO., N. Y., June 4th, 1867.

DR. A. B. WOODARD.—*Dear Sir:* I have thoroughly tested your Combined Packer and Vulcanizer, and most unhesitatingly pronounce it JUST THE THING. The work is nearly half done when the Flasks are closed, and a saving of time is thus effected; and I find the work comes out much smoother and more perfect than I have been able to produce by any other machine I have yet tried, and I have tried most of them.

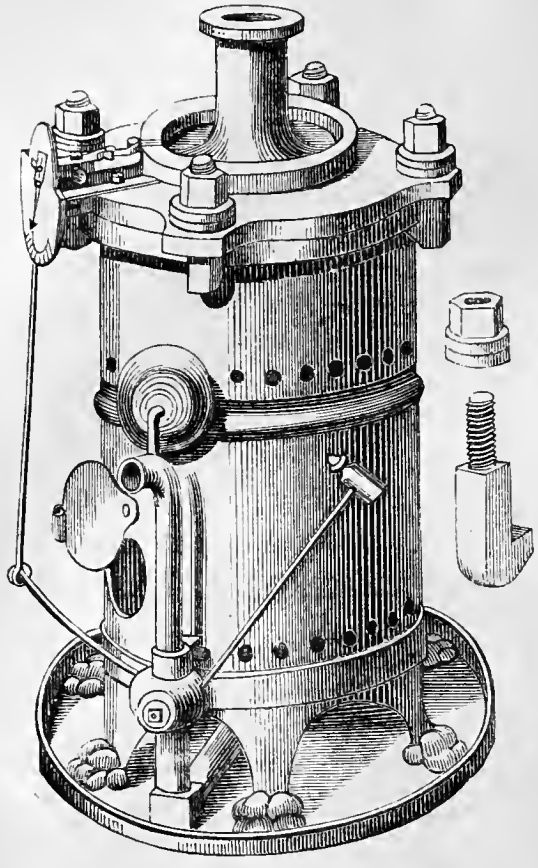
Yours, J. N. FORBES.

SYRACUSE, N. Y., June 9th, 1867.

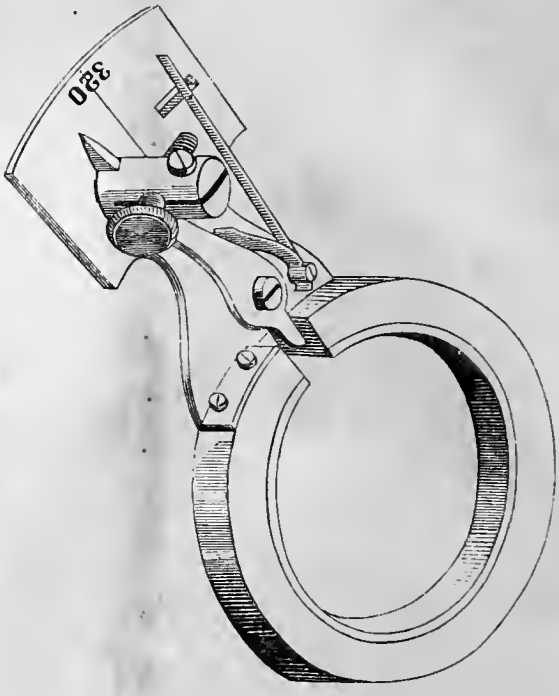
DR. A. B. WOODARD.—*Dear Sir:* I have experimented with your Vulcanizer and Packer, and find it a success. It is the best I ever used or ever saw. It is not half the trouble, and I can get up work in half the time that I can in any other machine. The Profession here have all seen it, and think it a grand success. Respectfully yours, J. H. BRADT.

HOFFSTADT'S PATENT

SELF-REGULATING VULCANIZER.



Vulcanizer.



Register.

Many attempts have been made to regulate the flame used for heating Vulcanizing Machines.

In this Vulcanizer the flame is not only regulated as desired, but the degree of heat indicated without a Thermometer, and the attention of the Operator drawn by the tap of a bell when the heat has reached any given point. The Boiler is believed to be the strongest in the market. A brass Ring is well brazed on the outside of the Boiler; the Lid, which is made of bell-metal, is fastened to the Boiler with three hook-shaped Screws made of the best steel. There is a Ring cast solid with the outside of the Lid which incloses the Inner Ring or Regulator, that will expand or contract by changes of heat, and work the Lever which extends on the platform. The Lever comes in contact with the Hand on the Dial registering the degree of heat, and when the heat has reached any determined point—say 320°—it disconnects the Lever which is attached to a spring Stop-cock, and turns down the flame as far as the Set-screw allows, which may be set to any desired point.

Directions.

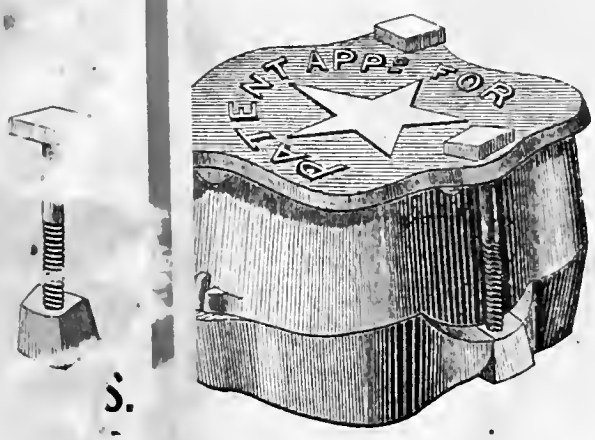
To open the Vulcanizer, take out the Screw opposite the Dial, and loosen the Nuts on the others to clear the hold of the Bolts. Raise the Lid, and slide it off the top of the Boiler. In closing, the same course is followed. Screw the Nuts down with the hand, then apply the Wrench to each until an even pressure is obtained. Place the boiler in the Jacket so that the slot in the Platform will be perpendicular with the end of the Lever below, then attach the Rod.

Light [illegible]as (which should not be turned on more than the Burner can consume). By means of the Set-screw at the end of the Lever on the Platform, the Rod can be [illegible] detach at any de[illegible] desired. When it disconnects, the Hammer is br[illegible] contact with the Be[illegible], which calls the attention of the Operator to the fac[illegible]he heat has [illegible] the desired point. A Coal-oil Burner, adapted to the V[illegible]canizer, furn[illegible]lesired.

Two-case Boiler, [illegible]el[illegible] Kerosene Burner, and two Reversible Iron Fla[illegible]egister. Complete $35 00

The Register, ch[illegible] attached to any Flat-top Vulcanizer . 7 00

THE STAR VULCANIZING FLASK.



S.

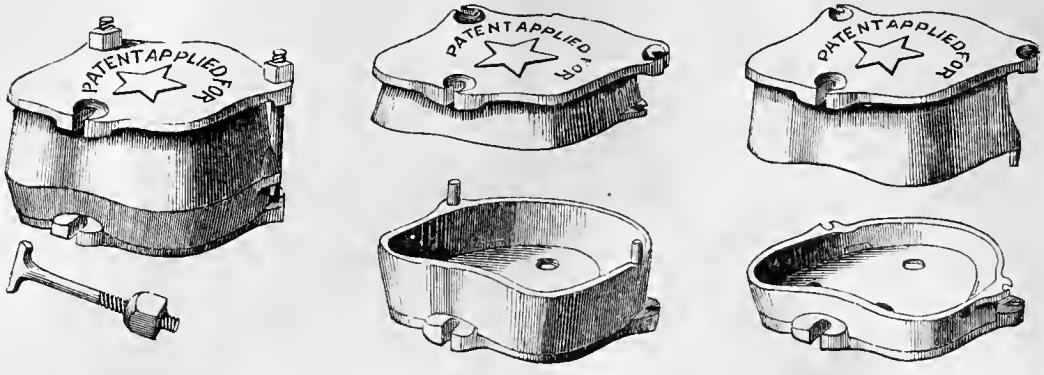
The advantage of this flask over others is in the thickness of the castings, its capacity, and the mode of fastening.

The objections to the ordinary Flasks have been that the screw-holes soon wear out; that the castings break with the pressure necessary to bring them together; and that there is not sufficient depth in the Flask for extreme cases. We think these objections are all met in the "Star" Flask. The Cut represents the fastening, a steel Bolt, with brass or malleable iron Nut tapered to fit the slot in the side of the Flask. The Nut is retained in the slot after it has been once used, and will remain until removed by the hammer. This Flask will fit most of the Vulcanizers in use.

Brass	$2 00
Iron	1 50
Bolt and Nut	12

REVERSIBLE FLASK.

PATENTED BY E. T. STARR, AUGUST 14, 1866.



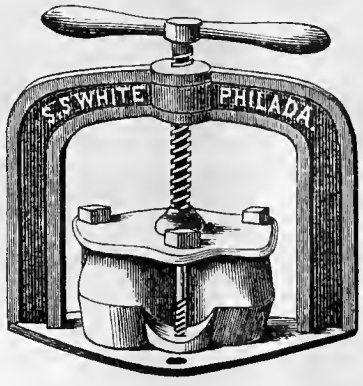
The Rings of this Flask are of different widths, either of them fitting the top or bottom accurately, as may be required.

By using the wide Ring next to the bottom, an admirable Flask is obtained, for deep cases and partial sets, or where the artificial gum rests on the natural. The narrow Ring is used next the bottom Plate, for whole dentures, where the parting is at the rim of the Plate. The bottom has three counter-sunk holes, through which the Plaster runs, and when set, holds the accompanying Ring securely to it. The fastenings of the Flask are T-shaped at one end, and fit the slots in the bottom Plate; and, being free at both ends, are more easily adjusted than ordinary bolts. The Flask being in four pieces (two Rings and two Plates), the Plaster is removed without the usual trouble.

The Cuts give a faithful representation of the Flask in different positions.

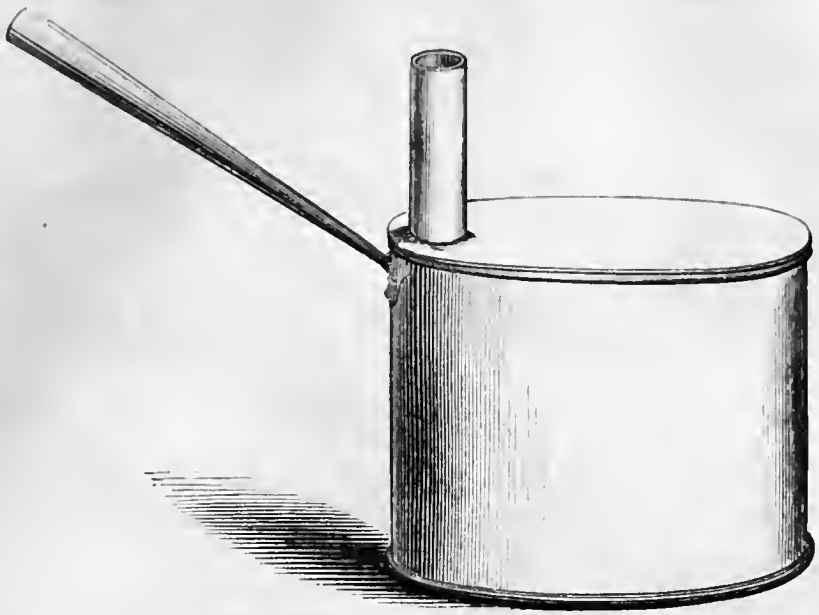
Brass	$2 00
Malleable Iron	1 50
Bolt and Nut	12

FLASK CLAMP.



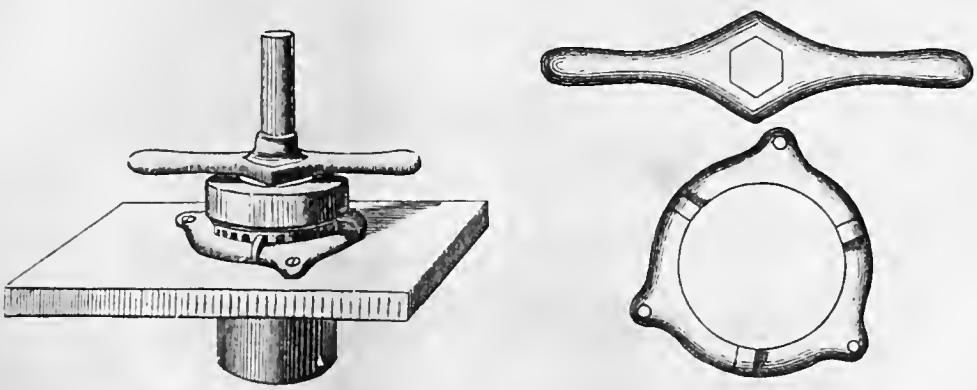
For closing Flasks after packing 2 00

BOILER FOR HEATING UP FLASKS.



Made of extra heavy Tin; with a capacity for four Flasks. It answers the double purpose of heating, on the cover, the Rubber used in packing, and for heating, in the water, the Flasks to bring them together after they are packed $1 00

WRENCH AND BED-PLATE.

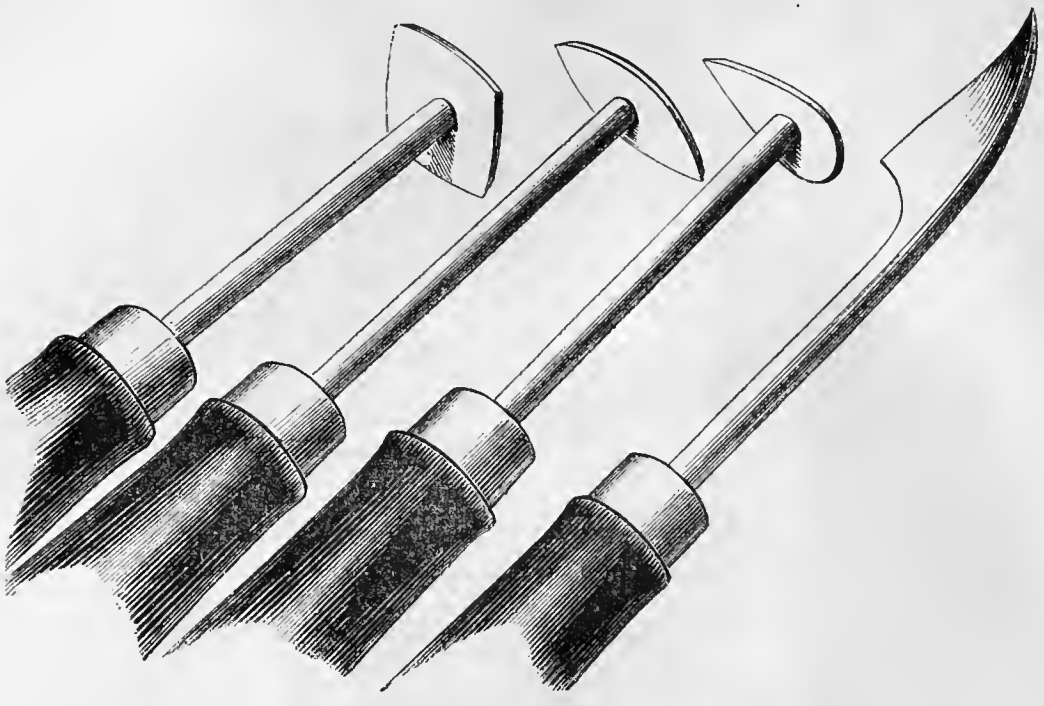


Adapted to Whitney's Vulcanizers. The Invention of Dr. Thomas Murray. A hole is cut in a table, work-bench, or box, the size of the Bed-plate, which is secured over it by three screws. It is a very efficient arrangement.

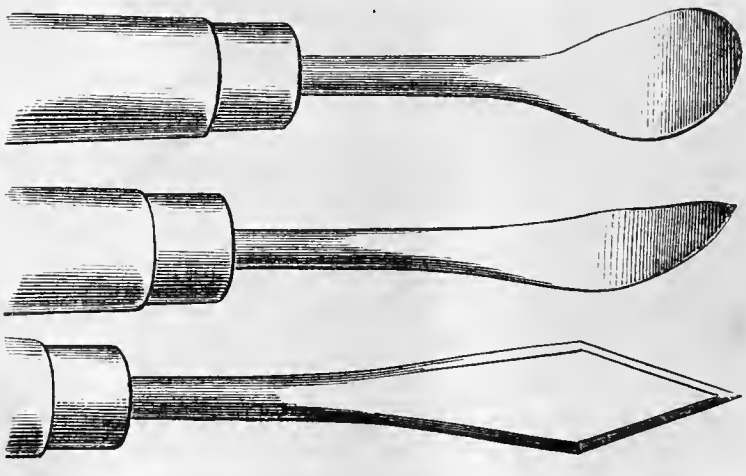
Per Set $1 00

VULCANITE SCRAPERS.

No. 1.

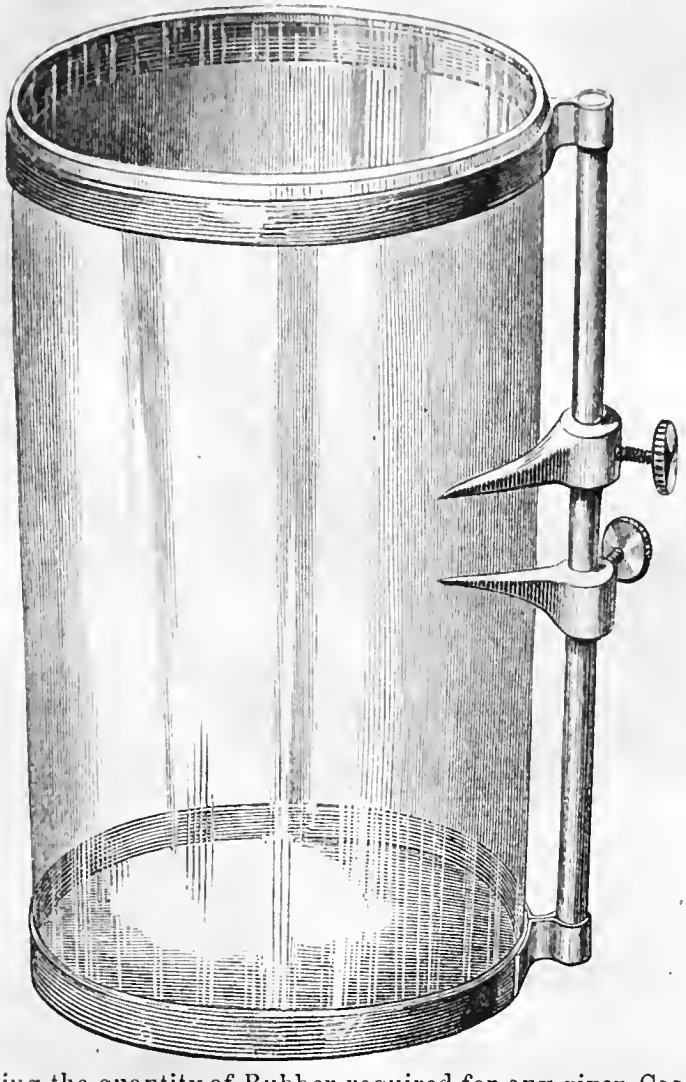


No. 2.



Polished Black Handles, No. 1	. . . . .	$0 50
Plain Wood " " 2	. . . . .	25

RUBBER GAUGE.



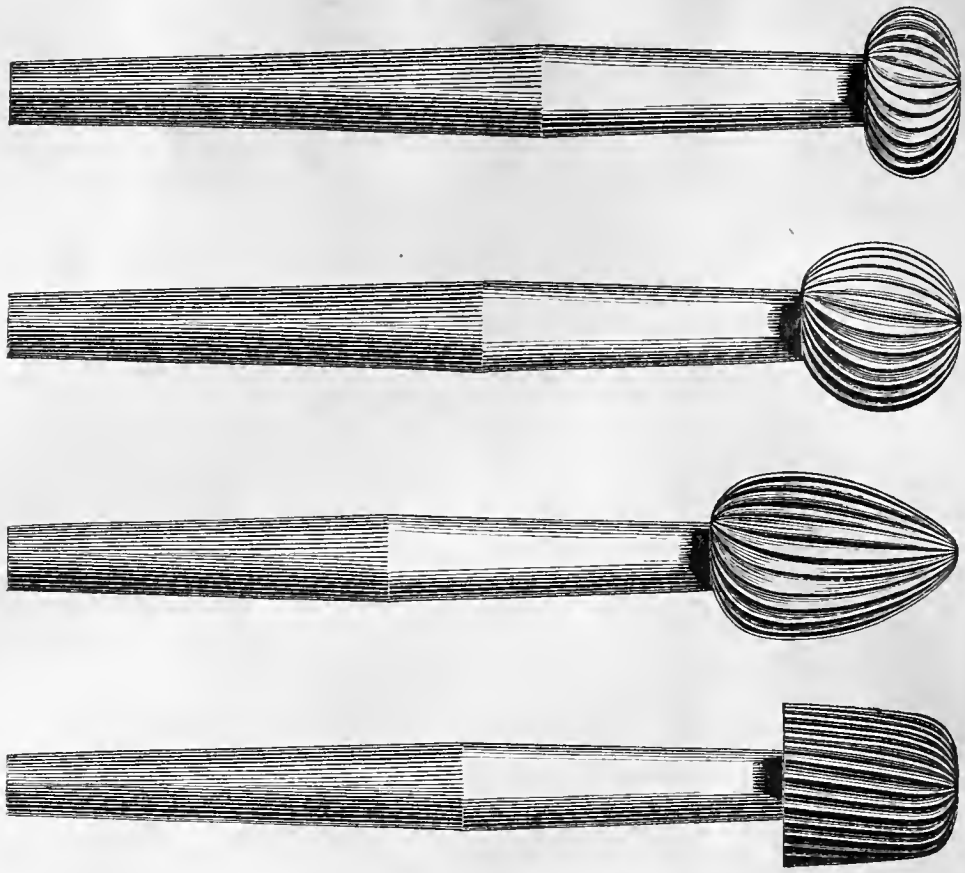
For ascertainiug the quantity of Rubber required for any given Case. The vessel being about half filled with water, set the lower Pointer to the level of the water; throw in every particle of the Model plate, set the upper Pointer to the rise of the water; empty the vessel, and again fill with water to the lower Pointer; add a sufficient quantity of Rubber to cause the water to rise to the upper Pointer, and there will be just enough to fill the mould. Allowance can then be made for surplus . $1 25

POLISHING WHEELS, ETC.

(See page 171.)

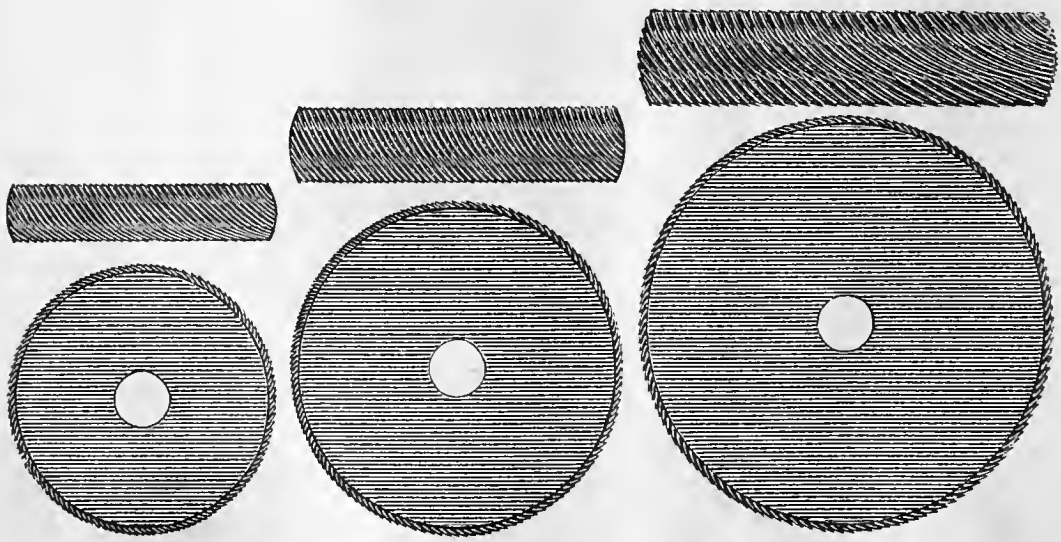
Bristle, Cotton, Felt, and Rubber Wheels; Rubber Cones, Cork Wheels and Cones, for polishing Vulcanite Work, etc.

VULCANITE BURS FOR LATHE.



These Burs are cut and finished in the best manner. Four forms are illustrated, each the exact size of the Instrument . . . . each $1 00

CIRCULAR FILES OR FILE-CUT WHEELS.



Designed for Vulcanite Work. The Cuts illustrate the diameter, width, and cut . . . . . each $1 25

No. 1. No. 2. No. 3.

WAX KNIVES OR SPATULAS.

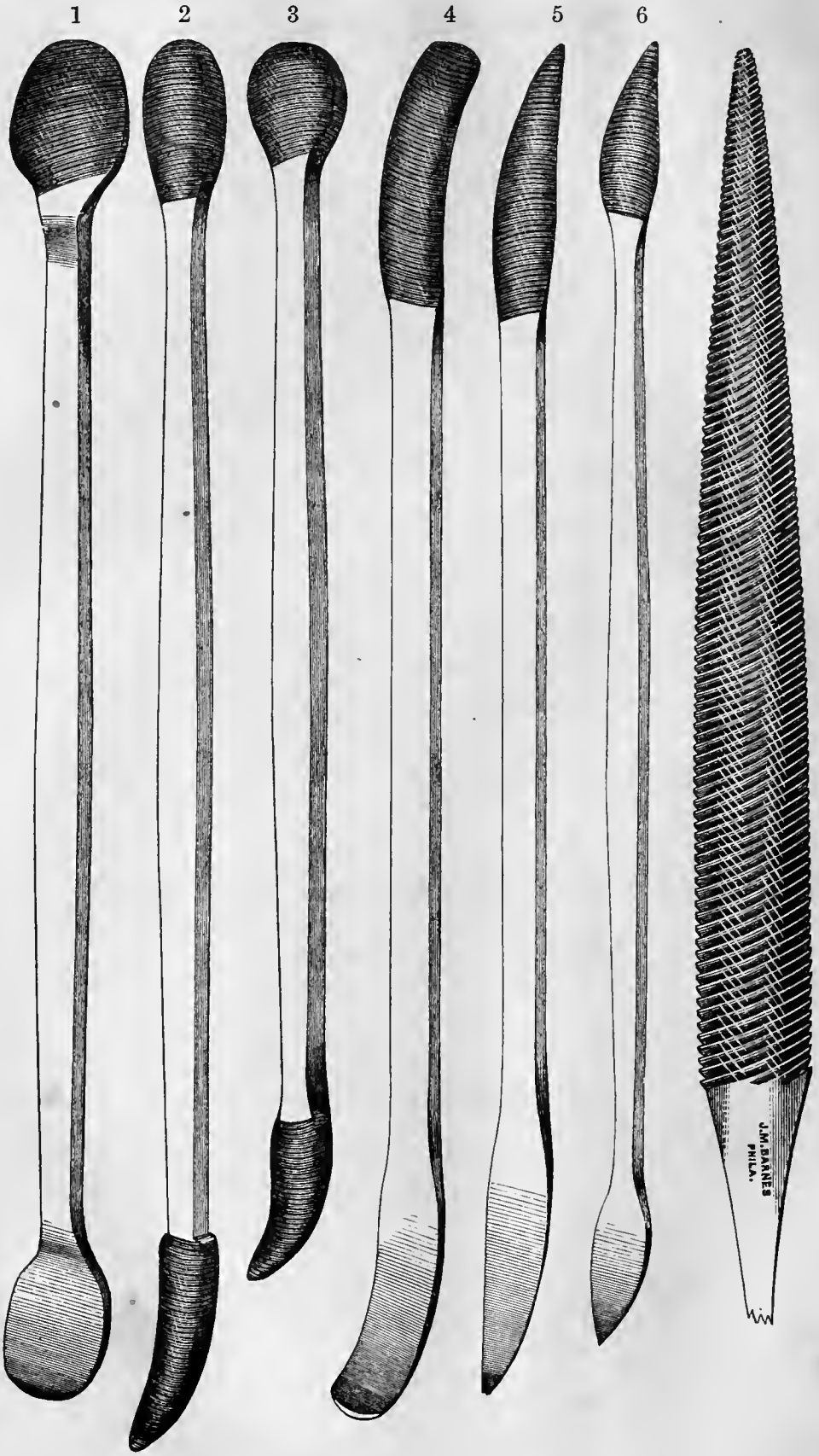
Ebony Mounted, No. 1	$0 75
Plain Centre, " 2	20
File-cut Handle, " 3	50

No. 4.

CALLIPERS.

Brass, No. 4	$0 50
Steel, " 5	1 00
" smaller size	75

No. 5.


1
2
3
4
5
6
J.M. BARNES
PHILA.

VULCANITE FILES.

(SEE CUTS ON PREVIOUS PAGE.)

Nos. 1, 4, 5, 6, are cut on one side of each end. Nos. 2 and 3 are cut on both sides of each end.

In addition to those delineated, we have the Half-round Coarse-cut Files, 5½ and 6½ inches in length, for the same purpose.

Double-end Rubber Files	each	$0 25
Half-round " " 4½ inch	"	22
" " " 5½ "	"	27
" " " 6½ "	"	32

SUPERIOR DENTAL GUM.

FOR PLATES FOR ARTIFICIAL TEETH.

Our own Manufacture.

The attention of the Dental Profession is invited to this preparation of Rubber. It is believed to be equal to any offered for sale, and is of a better color, when properly vulcanized, than most of that heretofore sold.

Per pound		$4 00
Also, a superior article of Black Rubber . .	per pound	3 00

SUPERIOR GUTTA-PERCHA FOR BASE.

Our own Manufacture.

Per pound	$3 00

RUBBER.

American Hard Rubber Co.'s Gum or Vulcanite .	per pound	4 00
" " " " Gutta-percha for Base	"	3 00

WAX FOR BASE PLATES.

(See page 172.)

ENGLISH RUBBER, PINK, WHITE, AND BLACK.

Pink Dental Rubber (deep), No. 1 x	$10 00
" " " (pale), " 1	10 00
*S P " "	8 00
White " "	8 00
Black " "	3 00

The above are supplied in one-pound and half-pound packets, with directions for Vulcanizing.

COATINGS FOR PLASTER CASTS.

(See page 175.)

POLISHING MATERIALS FOR VULCANITE WORK.

(See page 171.)

SOLDER FOR RUBBER WORK.

The advantages are that it saves time, the discoloring and weakening of the Plate and inconvenience of Vulcanizing. Directions accompany each Ingot.

Per Ingot $1 50

* This Rubber, though inferior in color to the other Pink Rubbers, is much stronger, and by coating the more exposed parts with the No. 1 or No. 1 x Pink Rubber, a very strong piece can be made with but a slight difference between the colors of the two kinds of Rubber used in its construction.

OTHER ARTICLES,

NOT ILLUSTRATED OR CLASSIFIED IN THIS DEPARTMENT,

WILL BE FOUND IN THE

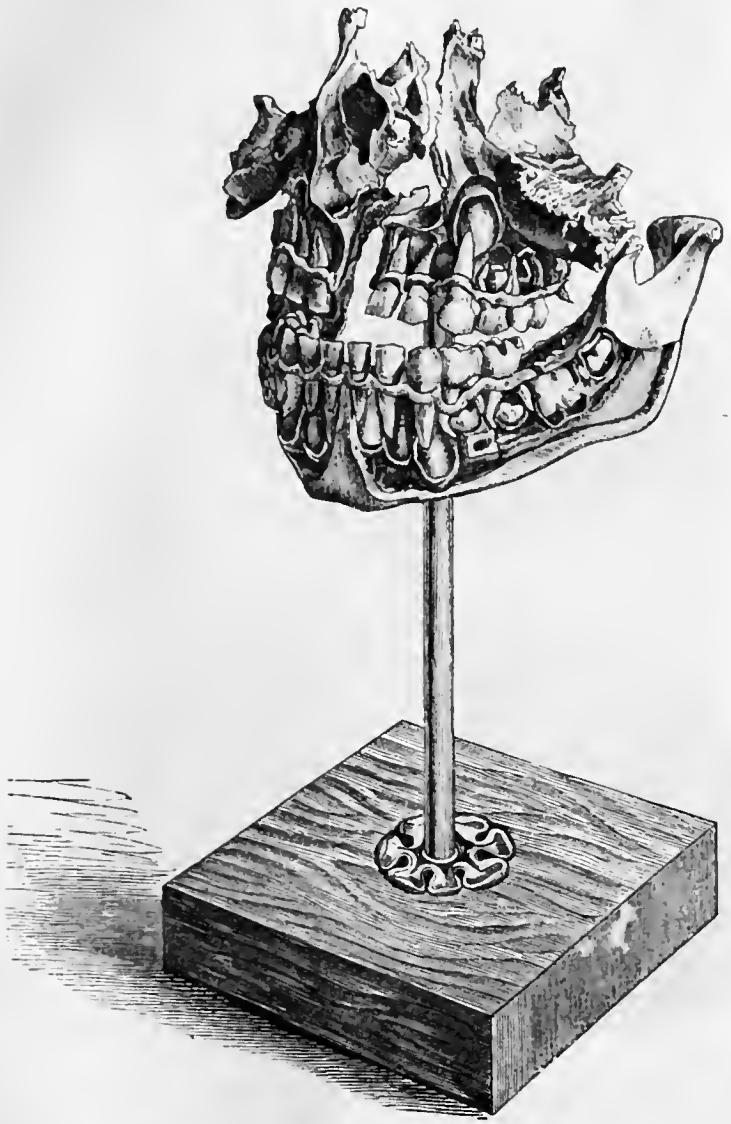
MISCELLANEOUS DEPARTMENT.

MISCELLANEOUS.

MISCELLANEOUS.

ANATOMICAL PREPARATIONS.

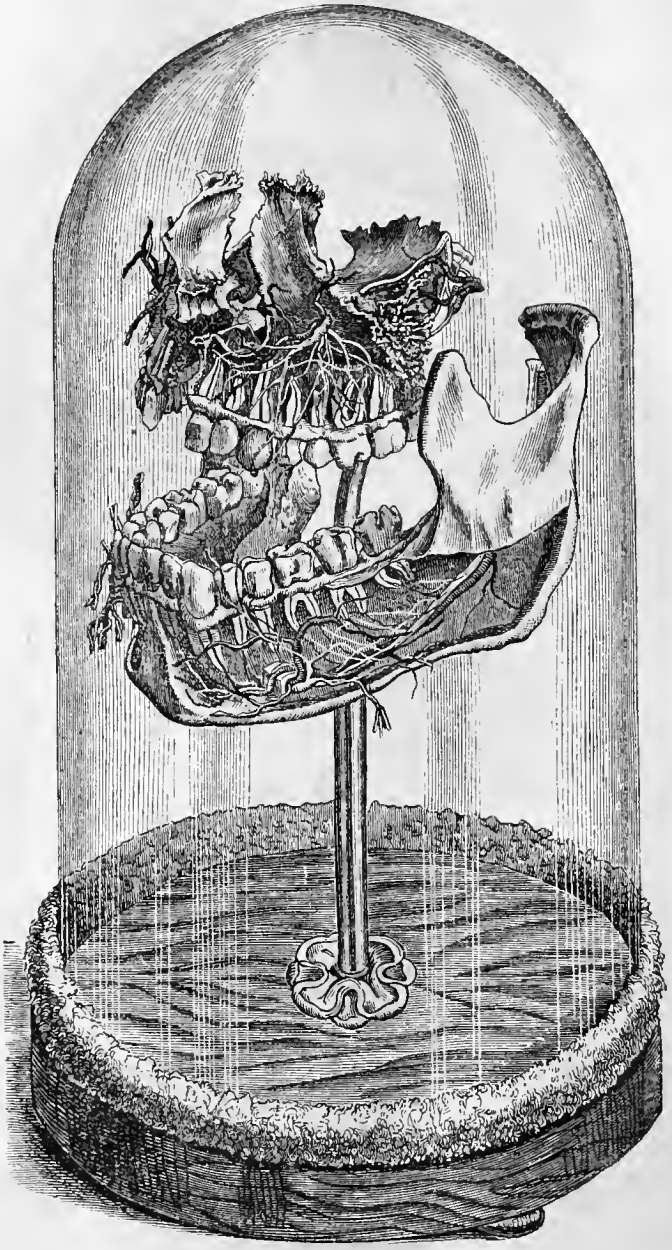
FIRST AND SECOND DENTITION.



First and Second Dentition, Upper and Lower Maxilla (Mounted), with Vase $15 00

There are two varieties of these Preparations; one exhibiting Dentition between the ages of 6 and 7—the other between the ages of 7 and 8 years—Mounted on Round Bases and covered with Glass Vases, as illustrated on the following page.

UPPER AND LOWER MAXILLA.



Upper and Lower Maxilla, exhibiting Nerve and Artery on one side, and Artery and Vein on the other, Jaw carved and Teeth split to show the Nerve Cavity (Mounted), with Vase . . $30 00

A supply of Adult Jaws and Dentitions always on hand, warranted perfect in every particular, and will be packed to transport safely, with proper handling, to any part of the country.

SECTION OF HEAD SHOWING FIFTH PAIR OF NERVES.

Section of Head, showing distribution of Fifth Pair of Nerves, connected with Teeth and Jaws (Mounted), with Vase . $50 00

The above Cut gives a general idea of a desirable Preparation, illustrating the distribution of the Fifth Pair of Nerves. They are not always exact copies of the Cut, but are selected with care from the stock of the Artist with a view to show the principal ramifications of this important pair of Nerves.

ANATOMICAL PREPARATIONS.

Head, showing First and Second Dentition (Mounted), with Vase	$30 00
Comparison of the Angle of the Lower Jaw in the Infant, Adult, and Old Age (Mounted), without Vase	9 50
Comparison of the Arch of the Upper Jaw in the Infant and the Adult (Mounted), without Vase	9 50
Skulls, No. 1	10 00
" " 2	8 00

ANATOMICAL ILLUSTRATION OF THE FIFTH NERVE.

NEW EDITION.

This Plate affords correct *views* of the course of the Fifth or Trifacial Nerve, and its connection with the other Cranial Nerves and the Sympathetic; the Arteries and parts accessory to it are clearly displayed. The Drawings are the size of life, and faithfully Colored.

The same Plate also contains representations of the Microscopical Anatomy of the Teeth.

This Work is strongly recommended as embracing far more than any Model, however complicated, is made to show, and, as a work of study and reference, will be found invaluable to the Profession.

Accompanying the Plate is a Pamphlet giving a concise and practical description of the Anatomy of the Fifth Pair of Nerves, being a Key to the Plate. By Jas. E. Garretson, M.D., D.D.S., Lecturer on Anatomy in the Philadelphia School of Anatomy and Operative Surgery.

Size of Plate, 21 by 27 inches.

The above, including the Description, will be put up in pasteboard Boxes, so as not to be injured in carrying, and sent, Free of Postage, on the receipt of Three Dollars. Mounted in Map Style, Four Dollars.

DENTISTS' ACCOUNT BOOKS.

Designed to accompany Bill Head No. 1, as described on page 204, with a similar Cut over each page, five inches in length; printed on fine paper, paged, and substantially bound in four sizes.

96 pages	$1 75	288 pages	$3 75
192 "	2 75	384 "	4 25

CHILD'S DENTAL RECORD.

Containing forms similar to Bill Head No. 2, as described on page 205. Four forms, 6½ inches long by 2½ inches wide on each page. Printed on good paper and substantially bound. 216 pages . . 3 00

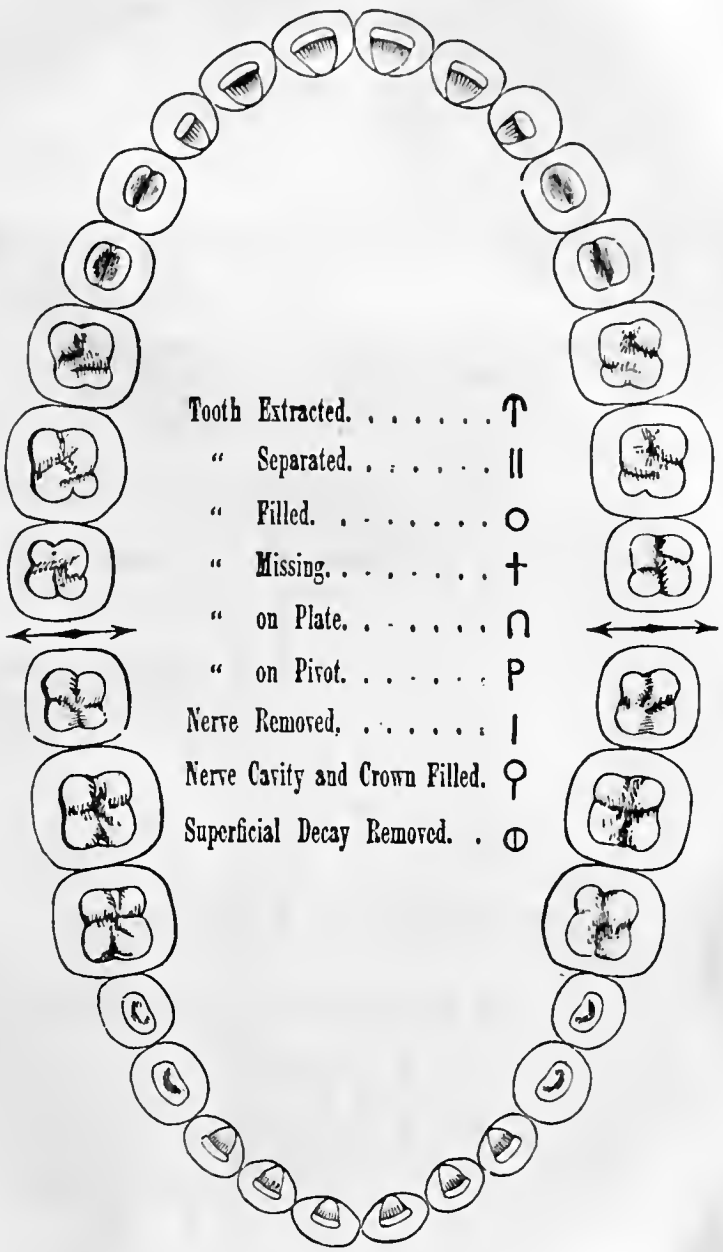
ALLPORT'S REGISTERING DENTAL LEDGER.

We have published a Ledger for Dentists' use, designed by Dr. Allport, of Chicago, and intended to facilitate the registering of accounts.

The annexed Cut represents a diagram, of which there are two on each page, with space alongside of each, appropriately ruled, for name of patient, reference, date of operations, charge for the same, and credit for amounts paid.

The symbols denote the character and locality of the various operations performed, thus showing at a glance the history and condition of the mouth of each patient.

These Books are got up in neat style, printed on good paper, and substantially bound.

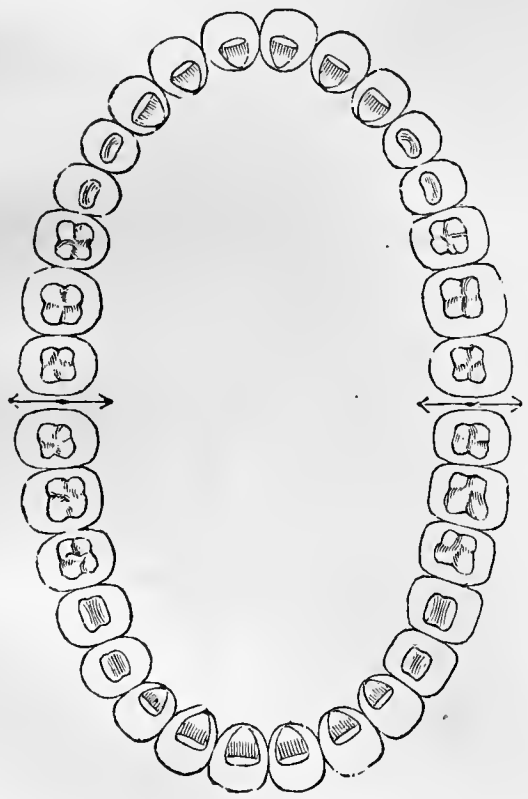


340 pages, half Turkey and Cloth sides (paper extra quality) .	$6 00
340 pages, half Roan	4 50
172 pages, "	3 00

Specimen pages sent on application.

Mr. 186

To Dr.



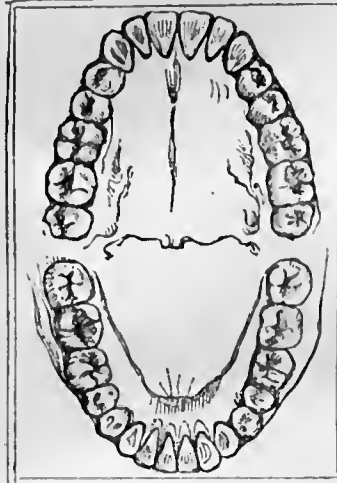
BILL HEAD, No. 1.

This is a form of Bill Head for Dentists, and is so arranged that both Operator and Patient are freed from all danger of imposition.

For example; if an incisor, bicuspid, or molar, either upper or lower, be operated upon, a mark within the circle of the corresponding tooth will designate the operation, so that when the Bill is presented the patient will know, by a glance at the diagram, whether the charge be correct or otherwise. It is assumed that the operator will use in connection with this form a book containing forms similar to the diagram. Size of Bill Head, 8½ inches wide by 7 inches long. Printed on fine paper, at $1 per hundred.

An ELECTROTYPE of the Diagram of Teeth for those who wish to print their own Bill Heads will be furnished at $1.

BILL HEAD, No. 2.



No. 18

M. .....

Dr. to .....

SURGEON DENTIST.

.....

.....

.....

.....

.....

.....

Received Payment, ...

The above is the exact size of Bill Head . . . . . per hundred $0 75

DENTIST'S POCKET DIARY

AND

APPOINTMENT-BOOK,

FOR THE PURPOSE OF

REGISTERING APPOINTMENTS FOR DENTAL OPERATIONS.

	MONDAY,		186
8		1	
9		2	
10		3	
11		4	
12		5	
	TUESDAY,		
8		1	
9		2	
10		3	
11		4	
12		5	

The above Diagram shows the exact size and style of two-thirds of a page of the Pocket Diary, presenting, when open, engagements for one week. The figures denote the hour of the engagement. It comprises 54 weeks, and being without date, is good for any time. It has also a neat Memorandum attached $0 75

DENTAL AND MEDICAL BOOKS.

Sansom on Chloroform. Cloth	$2 25
Tomes' Dental Surgery. Sheep	4 50
Harris' Principles and Practice. Cloth	6 00
" " " " Sheep	7 00
Thomas' Medical Dictionary. Cloth	3 50
" " " Sheep	3 75
Fox and Harris on the Teeth. "	4 00
Dental Cosmos. Bound vols.	3 50
Piggott's Dental Chemistry. Sheep	3 50
Handy's Text-Book of Anatomy. Sheep	4 00
Carpenter's Physiology. Cloth	5 50
" " Sheep	6 50
Wilson's Anatomy. Cloth	4 00
" " Sheep	5 00
Sharpey and Quain. 2 vols. Cloth	6 00
Dalton's Physiology. Cloth	5 25
" " Sheep	6 25
Dunglison's Physiology. 2 vols. Cloth	7 00
United States Dispensatory. Sheep	10 00
Fownes' Chemistry. Cloth	2 00
" " Sheep	2 50
Williams' Principles. Cloth	3 50
Leidy's Anatomy. Sheep	5 00
Richardson's Mechanical Dentistry. Sheep	3 50
Bond's Dental Medicine. Sheep	3 00
Gray's Anatomy. Cloth	6 00
" " Sheep	7 00
Robertson on Extracting. Cloth	1 50
Cleveland's Lexicon. Cloth	1 25
" " Tucks	1 50
Dunglison's Dictionary. Cloth	6 00
" " Sheep	6 75
Morton and Leeds' Chemistry. Cloth	2 00
Wood's Practice of Medicine. 2 vols. Sheep	12 00
Wildman on Vulcanite. Cloth	1 25
Watson's Practice of Medicine. 2 vols. Cloth	6 50
" " " " Sheep	7 50
Paget's Surgical Pathology. Cloth	6 00
" " " Sheep	7 00
Gross' System of Surgery. 2 vols. Sheep	15 00

Taft's Practical Treatise on Operative Dentistry. A New Revised and Enlarged Edition. Forthcoming.

Harris' Dictionary of Medicine and Dental Surgery. The Third Edition, Revised. Forthcoming.

Dental Anomalies, and their Influence upon the Production of Diseases of the Maxillary Bones. By A. M. Forget, M.D., C.L.D., etc. Memoir crowned by the Academy of Sciences, at its meeting of the 14th of March, 1859. Paris: Victor Masson. Translated from the French. Pamphlet Form $0 25

Instructions in the Manipulation of Hard Rubber or Vulcanite for Dental purposes. By E. Wildman, M.D., D.D.S., Professor of Mechanical Dentistry in the Pennsylvania College of Dental Surgery. Fourth Edition, with sixteen pages additional matter on the Composition of Rubber. Cloth 1 25

Bound Copies of the Dental Cosmos.—We can furnish volumes one, two, three, four, six, seven, and eight, of the Dental Cosmos, bound in a superior manner, in half Turkey Morocco . . per volume 3 50

TOOTH POWDER BOXES.

Paper, fancy Colors and Gilt, lined with Silver Paper . per dozen 60

Card Board, covered with Enameled Paper of delicate Colors, edged with Gold Paper. The finest quality of Paper Boxes made . per dozen 90

Wood, Varnished, No. 2, a fine article . . . . " 50

" " " 3, " . . . . " 60

" " " 4, " . . . . " 70

White Enameled or Pearl Color Glass Boxes, with Britannia Covers (we do not keep the Zinc Covers). $2\frac{3}{4}$ inches in diameter by $1\frac{1}{8}$ inches high. Per dozen 1 25

Semi-transparent Boxes, all Glass. $2\frac{1}{4}$ inches in diameter by 1 inch high. Per dozen 1 00

White Enameled or Pearl Color Boxes, all Glass. $2\frac{1}{2}$ inches in diameter by $1\frac{1}{4}$ inches high. Per dozen 1 25

White Enameled or Pearl Color Boxes, all Glass. 3 inches in diameter by $1\frac{1}{4}$ inches high. Per dozen 1 50

White Enameled or Pearl Color Boxes, all Glass. 3 inches square by 1 inch high, for Pastes. Per dozen 2 00

Semi-transparent Glass Jars, with Glass Covers. 3 inches in diameter by 3 inches high (6 oz.), for Pastes or Powders. Per dozen . . . 2 25

Transparent Glass Jars, with Glass Covers, 1 oz. . . per dozen 1 25

Also, a very handsome Gilt Rim, White Enameled Round Glass Box, $3\frac{1}{4}$ inches diameter, and $1\frac{3}{4}$ inches high. Each Box weighing 12 ounces. Per dozen 5 00

Note.—These Boxes—Paper, Wood, and Glass—are from the best manufacturers. Inferior qualities of each class are manufactured, but we do not have them on sale. We are prepared to furnish all described, by the Dozen, Gross, or in original Packages.

SCALES.

A fine assortment of Scales suitable for Physicians and Dentists, so arranged that the Apparatus can be mounted on the box or inclosed within it.

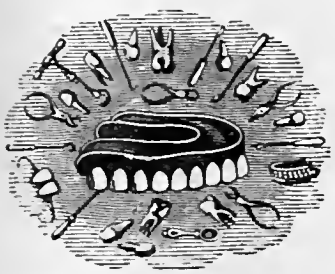
Oval Tin Boxes, to hold in hand		$1 50
Oak Boxes, 5 inch " "		1 30
" 6 " " "		1 80
Walnut Box, Pocket, 6 inches by 2 inches	No. 1552	5 00

This is a very compact arrangement. The Beam swings on the Lid, and but a single movement is required to adjust the Scale ready for use.

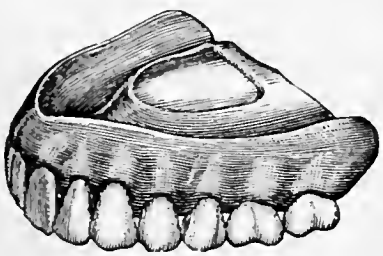
Walnut Box, 9½ inches by 4¾ inches	No. 1549–10	4 00
" 9½ " 5¾ "	" 1550–10	4 00
Mahogany Box, 8¼ inches by 4¼ inches	" 1510–9	4 50
Walnut " 10½ " 5¼ "	" 1549–11	4 50
Mahogany " 8½ " 4¼ "	" 1511–22	6 00
" " 9¾ " 5¾ "	" 1511–24	6 00
Marble-top " 8½ " 4 "	" 1513–22	7 00
Mahogany " 10½ " 5¼ "	" 1512–27	7 50
Silver Plated Post and Dishes, mounted on a Stone Base, 11½ inches by 5½ inches	No. 1560	7 50

DENTAL CUTS.

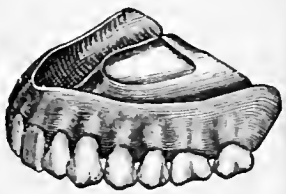
No. 2



No. 5.



No. 6.



No. 3.

No. 4.

No. 7.

The above Cuts represent such as are used for Advertisements and Business Cards; they are the exact height of type, and can be furnished at the following prices. When sent by Mail, postage extra.

No. 2. Electrotype,	80	cents;	postage	39	cents.
No. 3. Stereotype,	45	"	"	12	"
No. 4. "	37	"	"	6	"
No. 5. Electrotype,	75	"	"	36	"
No. 6. "	60	"	"	24	"
No. 6. Stereotype,	45	"	"	24	"
No. 7. Electrotype,	50	"	"	9	"
No. 7. Stereotype,	37	"	"	9	"

MISCELLANEOUS.

PRICE LIST AND INDEX.

Where the PRICES are not given in this List, the figures refer to the Pages of the Catalogue in which the Articles are Described or Illustrated.

A.

B.

C.

D.

Dentist's Pocket Diary and Appointment-Book, 206.
Dentist's Stand or Table, 130.
Dibble's Saliva Pump, 81.
Draw Plates, 20 holes, Stubs' $1 80
Draw Plates, 24 holes, Stubs' 2 00
Drills and Burs, 68 to 71.
Drill Chucks (Olmsted's Patent), self-tightening 6 00
Drills, for Sockets . . . . . per dozen 1 50
Drills (Merry's), 77.
Duct and Tongue Compressors, 83, 84.

E.

Emery . . . . . per box 10
Emery Cloth . . . . . per sheet 10
Emery Paper . . . . . " 05
Empire Lathe, 159.
Enamel Chisels, 62, 64.
Enamel for Point and Base . . . . . per ounce 38
Enamel, Gum (Allen's) . . . . . " 2 50
Enamel, Gum, for Blocks . . . . . " 2 00
English Rose Red, best . . . . . " 1 50
English Rubber, Pink, White, and Black, 196.
Ether, Concentrated, 1 pound Bottles 2 00
Excavator Cups, 132.
Excavators, 65, 66, 67.
Excavators and Chisels (Goodwillie's Set), 63.
Excavators, for Socket . . . . . per dozen 1 50
Extension Brackets, 131, 132.
Extension Thimbles, 80.
Extracting Cases, 104.
Extractors—Punches, Hooks, Screws, 47.

F.

Felt Wheels, 171.
Fifty-drop Galvanic Battery, 136.
File Carriers, 75.
File Carriers, Pearl or Cameo Handles . . . . . 4 00 to 5 00
File Carriers, Steel Bright, Straight and Double Bend . . 2 25 and 3 00
File-cut Wheels for Lathe, 192.
Files for Vulcanite, 194, 195.
Files (Murphy's), 74.
Files, Rommetin's (successor to Froid), 74, 166.
Files, Serrating . . . . . 25 and 50

G.

H.

I.

India-rubber Tubing, French	per foot	$0 20
Ingot Moulds, Iron, broad Base, to slide, with Handles		3 00
Inhalers for Nitrous Oxide Gas, 144, 145.		
Instrument Cases, empty, 104.		
Instrument Handles, Pearl and Cameo, 114.		
Instrument Stands, 130.		
Iodine in Creasote, Saturated Solut., ½ oz. Glass-stoppered Bottles		50
Iodine in Glycerin, Saturated Solut., 1 oz. Glass-stoppered Bottles		40
Iodine, Tincture, 1 oz. Glass-stoppered Bottles		35
Iron, Preparations of, 147.		
Isinglass Plaster, 1 yard long, 6 inches wide, in Box		75

K.

Kaolin, prepared	per pound	12
Knives for preparing Microscopic Objects (Valentine's)		6 00
Knives for trimming Plaster Casts		25

L.

Laboratory Tongs, Steel, Jointed		1 25
Ladles of Cast-iron, No. 5, with Wrought-iron Handles		50
Ladles of Cast-iron, No. 6, with Wrought-iron Handles		60
Ladles of Cast-iron, No. 7, with Wrought-iron Handles		75
Ladles of Cast-iron, two Ladles and one Handle detached	per set	1 00
Ladles of Cast-iron, without Handles, extra large		50
Lamps, Alcohol, for Soldering		90
Lamps, Alcohol, for Soldering (Franklin's Safety), 164.		
Lamps, Oil, for Soldering		75
Lamps for Annealing Gold Foil, 77, 78.		
Lamps for Vulcanizing, 183.		
Lamps, Glass Spirit, 164.		
Lancets, Abscess, Steel Handles, 90.		
Lancets, Fixed Blades, 50.		
Lancets, Pearl Handles, 50.		
Lancets, Pocket, 50.		
Lathe Burs, for removing Solder		75
Lathe Cord Couplings, Steel		50
Lathe Cords, Pressed Leather	per foot	10
Lathe Files, Circular, 192.		
Lathe Saws, attached to Shaft		0 75
Lathes, 157 to 161.		
Lead, (price fluctuates).		

M.

N.

Napkins, 92.
Napkin Holders, 85.
Nerve Bit Holder, Ivory Handle $1 00
Nerve Bit Holder, Steel Handle 75
Nerve Cavity Instruments, 71, 72, 73.
Nerve Cavity Pluggers (Bits) . . . . . per dozen 75
Nerve Extractors, 73.
Nerve Paste (S. S. W's.) 50
Nerve Paste with Morphia 1 25
Nippers for cutting out Chambers, 169.
Nippers for cutting out Plate, 169.
Nippers for cuting out Plate (Stubs') 2 90
Nippers, Side and Front, polished Steel 90
Nippers, Side and Front (Stubs') 1 25
Nitrate of Ammonia, 145, 146.
Nitrous Oxide Gas Apparatus, 142, 143.
Nitrous Oxide Gas Inhalers, 144, 145.
Noiseless Hand Lathe, 160.
Nose Compress, 145.

O.

Odontoplasma (Michaelis') . . . . . per box 1 00
Oil Cans, Zinc, Spring Bottom 25
Oil, Sperm, 161.
Oil Stones, Arkansas, 136.
Operating Cases, 94 to 103.
Operating Chairs, 116 to 123.
Operating Tables, 130.
Orange Wood, for Wedging . . . . . per bundle 10
Os Artificiel (Roberts') . . . . . per box 1 00
Os Artificiel (Roberts'), Gum Color . . . . . " 1 00
Ovens (Hayes') Vulcanizing, 182.
Oxy-Chloride of Zinc (Smith's) . . . . . per box 1 00 to 4 00

P.

Paper Pellets for drying out Cavities, 900 in a Box 50
Pattern Metal, Lead covered with Tin . . . . . per pound 50
Pattern Metal, extra thick . . . . . " 60
Pearl Handles for Lancets, 112.
Pearl Handles for Scalers, 112.
Pearl Handles for Scissors, 113.

Pearl Hand Mirrors, 108, 109, 110.
Pearl Instrument Handles, 114.
Pearl Mouth Mirrors, 110, 111, 112.
Pearl Tongue or Cheek Holders, 113.
Phénol Sodique, 147.
Pin Holders $0 35
Pipes or Points for Syringes. Silver 50
Pivot Wood . . . . . per box 50
Plain Enamel, for Point and Base . . . . . per ounce 38
Plaster, 174.
Plaster . . . . . per quart 08
Plaster Knives 25
Plate and Wire Gauges (Brown & Sharpe's standard), 167.
Plate and Wire, Gold, Silver, and Platina, 28.
Plate Benders for Upper and Lower Plate, 170.
Plate Brushes, Hand . . . . . 50 to 75
Plate Burnishers, Blood-stone . . . . . 1 25 to 1 50
Plate Burnishers, Steel 50
Plate Files, Rommetin's (successor to Froid), 166.
Plate Files (Stubs'), 167.
Plate Nippers for cutting out Chambers, 169.
Plate Nippers, for cutting out Plate in fitting around the Teeth, 169.
Plate Nippers, for cutting out Plate in fitting around the Teeth (Stubs') . 2 90
Plate Punches, for punching Rivet Holes, 169.
Plate Punches, for punching Rivet Holes, improved, 169.
Plate Scrapers 25
Plate Shears, curved (Stubs') . . . . . 1 20 to 1 70
Plate Shears, straight (Stubs') . . . . . 90 to 1 25
Plate Shears with Scissor Handles, 166.
Plate Shears with Scissor Handles, Nut Fastenings 1 50
Plate Shears with Scissor Handles, curved 2 50
Platina Scraps put into Plate or Wire . . . . . per ounce 80
Platina, Sponge . . . . . per dwt. 75
Pliers and Plugger combined, 75.
Pliers, Round and Flat Nosed 40
Pliers, Round and Flat Nosed (Stubs') 65
Plug Burnishers, 54, 55, 57, 60.
Plug Finishing Burs, 76.
Pluggers, 51 to 58.
Pluggers, Amalgam, 60.
Pluggers, for Sockets . . . . . per dozen 2 50
Plugging Forceps, 48 to 50.
Plugging Mallets, 59.
Plugging Mallet, Automatic, 58.
Plug Pliers for carrying Gold to the Cavity 50

Plug Pliers for carrying Gold to the Cavity, extra large $0 75
Plug Pliers for carrying Gold to the Cavity, mounted with Shell . . 2 00
Pocket Diary and Appointment-Book, 206.
Polishing Apparatus, 157 to 161.
Polishing Materials, 171.
Polishing Tape, 91, 92.
Polishing Tape, Water-proof, 92.
Porcelain Impression Cups, 175.
Portable Forges, 154.
Portable Head-rest 6 25
Porte Polishers, 88.
Porte Polishers, Ebony Handle 1 50
Potassa, Chlorate of, pulverized, 8 oz. Bottles 75
Powdered Calcined Buck Horn . . . . . 12 and 38
Prepared Chalk . . . . . per pound 15
Prepared Flax for drying out Cavities . . . . . per pkge. 15
Preparations for Office use, 146.
Preparations of Iron, 147.
Press for Corundum Wheels, making a wheel 3 inches in diameter . . 4 00
Pumice-stone, powdered . . . . . per box 10
Pure Cotton for drying out Cavities . . . . . per pkge. 20
Pure Rubber for separating . . . . . per ounce 38
Pure Rubber for Coffer-dam . . . . . " 50

R.

Register for Vulcanizers (Hoffstadt's), 186.
Revolving Head Short Sockets, 91.
Rhigolene, 12 oz. Bottles 1 00
Riveting Hammers, 168.
Rolling Mills, 155, 156.
Rose Red, English . . . . . per ounce 1 50
Rosewood Hand Mirrors, 114.
Rosewood Mouth Mirrors, 114.
Rotten-stone . . . . . per box 10
Rouge (a superior article) . . . . . per ounce box 25
Rubber Base, 195, 196.
Rubber (Coffer-dam), 93.
Rubber Files, 194, 195.
Rubber Gas Bags, 146.
Rubber Gasometers, 146.
Rubber Gauges, 191.
Rubber Solder, 196.
Rubber Tablets, Soft Rubber, 3–16 inch thick, 8 inches long, 5 inches wide, used under work to protect it 1 25
Rubber Tablets, same as above, 3 inches square 50

S.

Sockets, Plain		$1 00 to 1 50
Sockets, Revolving Head		2 25
Sockets, Ring Slide, for Nerve Bits		1 00
Sockets, Short, 91.		
Sockets, Spring Catch		3 00
Sockets, Spring Catch, Revolving Head		4 00
Solder Burs, Lathe		75
Solder for Plate, Gold and Silver, 28.		
Solder for Rubber Work, 196.		
Soldering Lamps		75 and 90
Soldering Lamp (Franklin's Safety), 164.		
Soldering Pans, 163.		
Solder Tongs, 7, 9, and 12 inches		45, 50, 60
Solution Perchloride of Iron	per ounce bottle	25
Spar, Prepared, Common	per pound	12
Spar, Prepared, for Enamel	"	75
Spar, Prepared, for Body	"	50
Spatulas for Manipulating Wax, 193.		
Spatulas for Sand Moulding, 174.		
Spatulas, Steel, English, 4 inch		25
Spatulas, Steel, English, 5 inch		30
Spatulas, Steel, English, 6 inch		40
Spelter (Zinc), best Lehigh (fluctuates).		
Sperm Oil, Pure, for Lubricating, 161.		
Spirit Lamps, Glass, 164.		
Spittoon Funnels	per pound	50
Spittoon Marbles, 129.		
Spittoon-stands, 128, 129.		
Spittoon (Whitcomb's) Fountain, 126.		
Sponge Platina	per dwt.	75
Spray Apparatus, 137 to 141.		
Spunk for drying out Cavities, 93.		
Stand or Table for Instruments, 130.		
Stopping (Bevins'), ½ oz. Boxes		2 00
Stopping (Hills')	per ounce	5 00
Stopping (S. S. White's)	"	2 00
Students' Cases, 105, 106.		
Stump Extractors, 47.		
Styptic Colloid, 2 oz. Bottles		60
Styptic Plaster	per box	75
Sulphuric Ether, Concentrated, 1 pound bottles		2 00
Syringes, 79.		
Syringes, Elastic Bulb, 79.		

T.

Table Blow-pipe, 156.
Table Lathes, 160, 161.
Table or Stand for Instruments, 130.
Tape Carrier, Ivory Handle, 88.
Tape—Corundum, Silex, and Buck Horn . . . . . per piece $0 08
Tape, Water-proof Polishing . . . . . " 10
Teeth Cases, 106, 107.
Thermometers for Vulcanizers, various makes and prices.
Thimbles, Extension (Taft's), 80.
Tincture of Catechu, 8 oz. Bottles 75
Tincture of Iodine, 1 oz. Glass-stoppered Bottles 35
Tincture of Myrrh, 8 oz. Bottles 1 00
Tincture of White Oak Bark, 8 oz. Bottles 60
Tin Foil (S. S. W's.) . . . . . per book 50
Tin, in bars (fluctuates).
Toilet Mouth Wash, 148.
Tongs for Crucibles, Laboratory, etc., 170.
Tongue and Duct Compressors, 83, 84.
Tongue Holders (Flagg's), 84.
Tongue or Cheek Holders, Pearl, 113.
Tooth Brushes, 149.
Tooth Brushes (Dr. J. D. White's Pattern) . . . . per dozen 4 00
Tooth Holders for holding Teeth while grinding 15
Tooth Polisher (Luther's) 1 00
Tooth Powder, 147, 148.
Tooth Powder Boxes, 208.
Tooth Tablets (Lyon's), 149.
Tooth Wash, 148.
Trephine for Antrum, 88.
Tripoli . . . . . per box 10
Troy Weights. Sets from 1 grain to 1 ounce 75
Tubing, Rubber, 93, 146.
Turn Keys . . . . . 2 00 and 3 00
Tweezers for picking up Solder 20

U.

United States Lathe, 159.
Universal Porte Polisher, 88.
Upper and Lower Maxilla, 200.

V.

Valentine Knife, for preparing Microscopic Objects $6 00
Vaporizers for Local Anæsthesia, 137 to 141.
Varnish, Sandarac, 2 oz. Bottles 25
Velvet, Cotton, Silk finish, for lining Cases . . . per yard 2 00
Velvet, extra heavy, all Silk, for lining Cases . . . . " 10 00
Vises for Bench, 4 inch, Plain 3 12
Vises for Bench, 4½ inch, Plain 3 25
Vises for Bench, 5 inch, Plain 3 38
Vises for Hand, Wood Handle, 3, 3½, and 4 inches 1 00
Vises, Parallel 9 50
Vises, Pin, Hollow 1 00
Vises, Pin, with Screw 1 00
Vises, Pin, with Slides 1 00
Vulcanite Base, 195, 196.
Vulcanite Burs, Lathe, 192.
Vulcanite Files, 194, 195.
Vulcanite Files, Lathe, 192.
Vulcanite Packers, six shapes . . . . . each 25
Vulcanite Scrapers, 190.
Vulcanizers, 181 to 187.
Vulcanizing Flasks, 181 to 188.
Vulcanizing Lamps, 183.

W.

Water-proof Polishing Tape, 92.
Wax Preparations, 172.
Wax Spatulas, 193.
Wedge Cutter, 90.
Wedgewood Mortars and Pestles . . . . . 60 to 5 00
Wedging Wood . . . . . per bundle 10
Weights, Troy, Sets of 1 grain to 1 ounce 75
Whet-stones, Arkansas, 136.
Whitcomb's Fountain Spittoon, 126.
White Oak Bark, Tincture, 8 oz. Bottles 60
Whitney's Vulcanizers, 181.
Whitney's Vulcanizing Flasks, 181.
Wire and Plate Gauge, 167.
Wire for binding Casts . . . . . per spool 20
Wire, Gold, Silver, and Platina, 28.
Woodard's Vulcanizer, 184, 185.
Wood Handles for Files, etc. . . . . 4 to 10
Wrench and Bed-plate, 189.

Z.

Zinc or Spelter (fluctuates).

NOTICE.

ALL NEW INVENTIONS OR MANUFACTURES

APPLICABLE TO THE

PRACTICE OF DENTISTRY

WILL BE NOTICED AS THEY APPEAR

IN THE

ADVERTISING COLUMNS

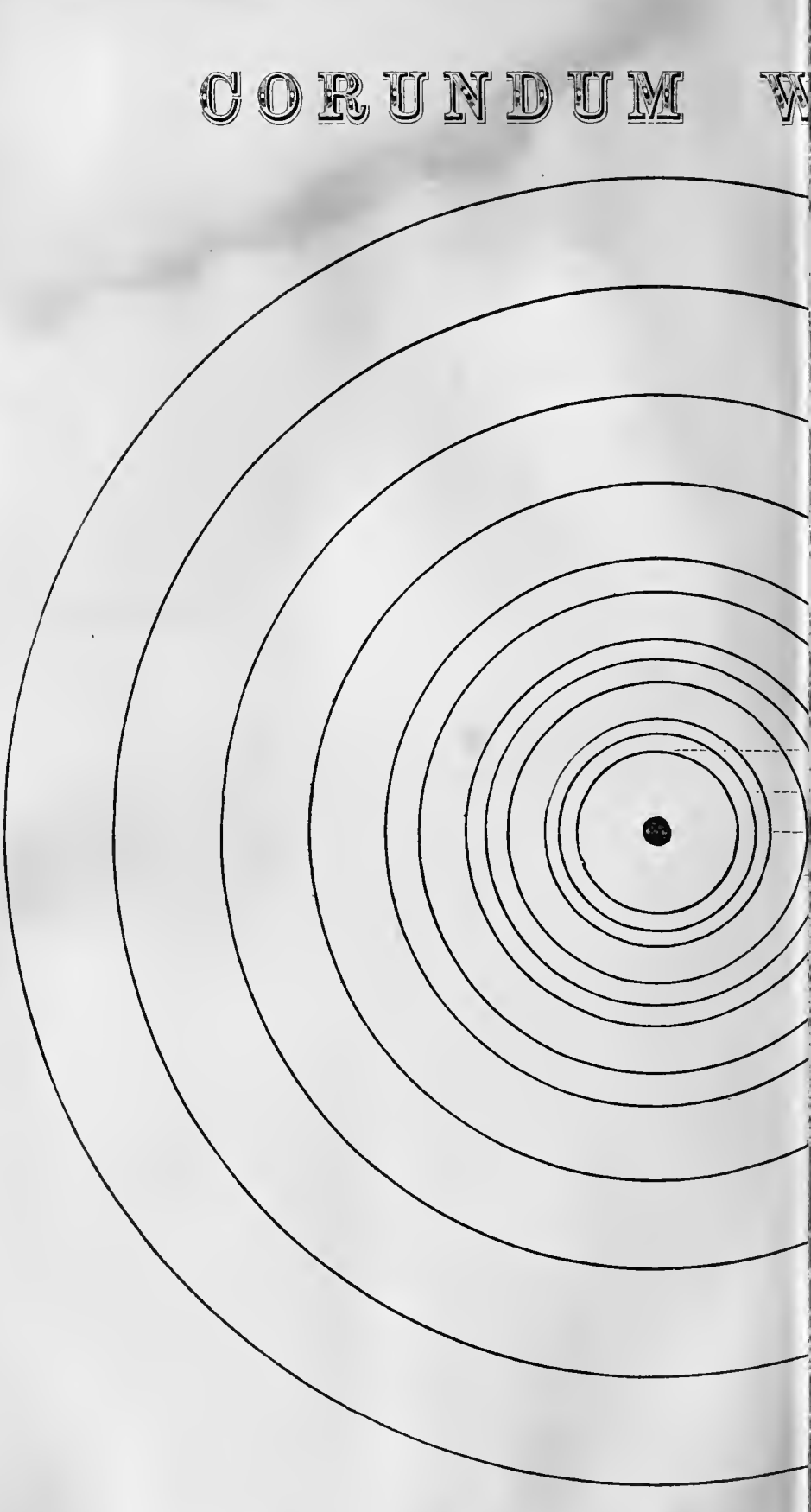
OF THE

DENTAL COSMOS.

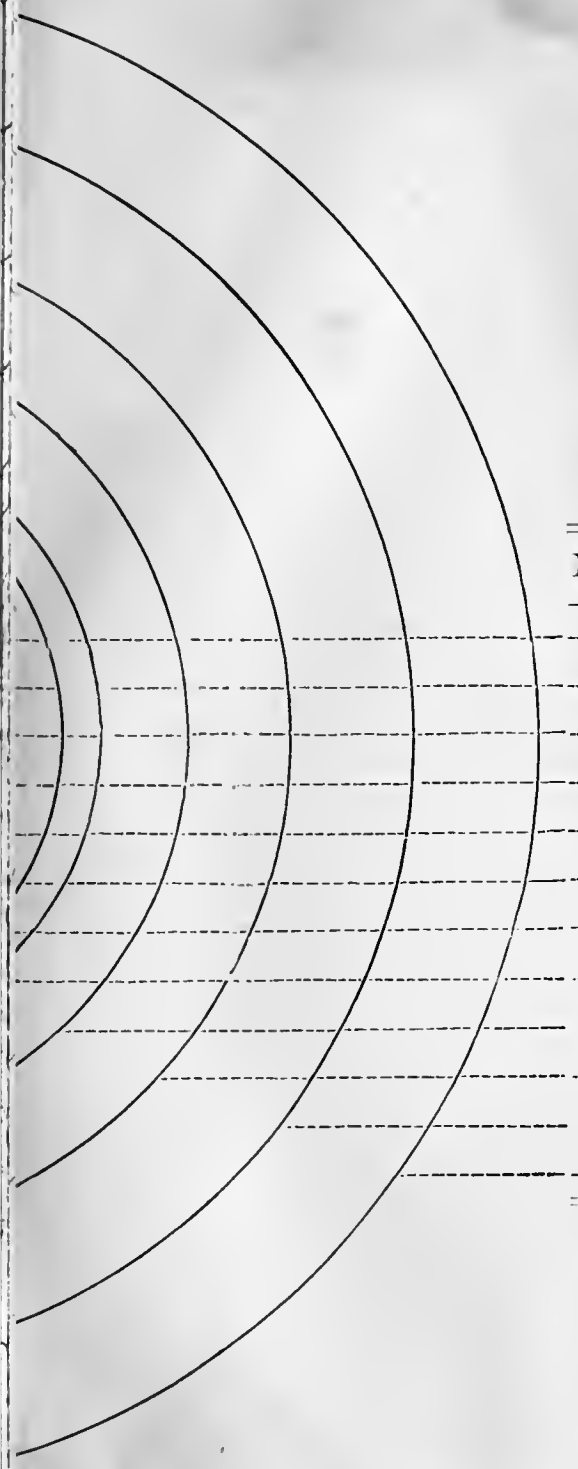
(See page 13.)

LIPPINCOTT'S PRESS,
PHILADELPHIA.

CORUNDUM W



HEELS.



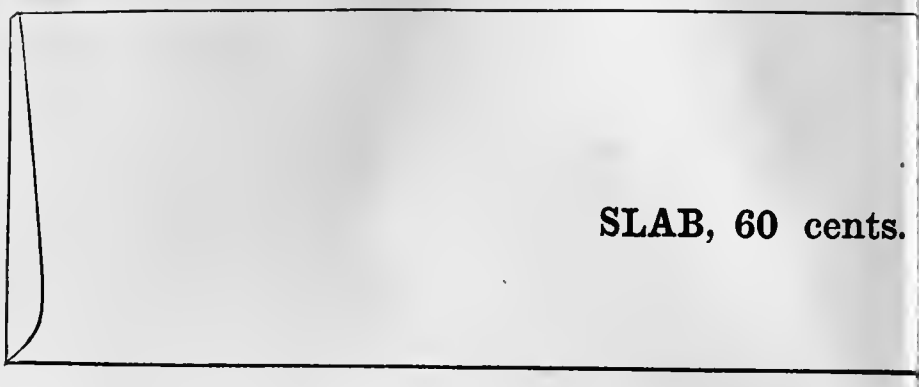
THICKNESS.

Nos.	¼ in.	½ in.	¾ in.	1 in.
00	$ 07	$	$	$
0	09			
1	12	18	25	35
2	16	20	30	40
3	20	30	45	60
4	25	40	60	80
5	30	60	90	1.20
6	40	75	1.15	1.50
7	60	1.00	1.50	2.00
8	1.00	1.50	2.50	3.50
9	2.00	3.00	4.00	5.50
10	3.00	4.00	6.00	8.00

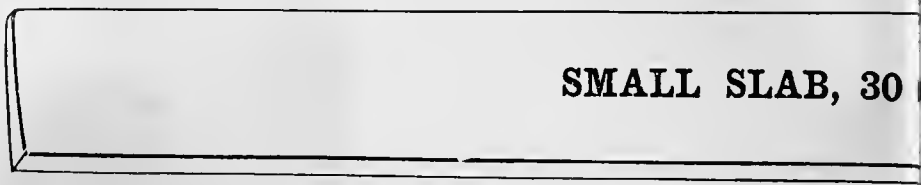
Intermediate thicknesses at intermediate prices.

(See page 178.)

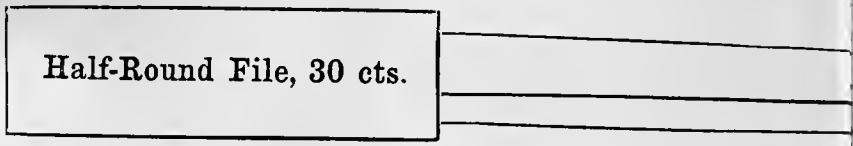
CORUNDUM

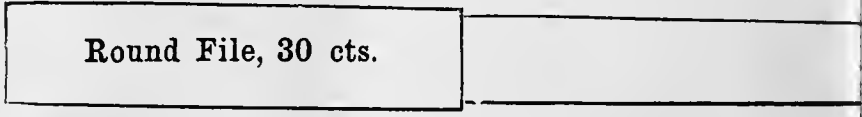


SLAB, 60 cents.



SMALL SLAB, 30





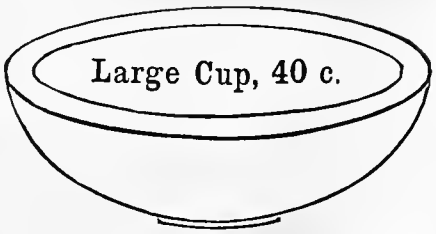
FLAT FILE, 30 ce

The outlines describe the size, and are intended
(See p

FILES, ETC.

nts.

s.



a guide for fixing prices and making out orders.
178.)